Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

November 28, 1960

PHOSGENE: WEAPON TURNED BUILDING BLOCK

OPD SPECIAL 'DEPTH' REPORT

PAGE THREE

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Oil, Paint and Drug Reporter

Vol. 178 No. 23 30 Church St., New York 7, N. Y. November 28, 1960

PHOSGENE'S GROWING END-USES
Urethanes to Govern Future Demand

	1965	1962	1960	1958
	(Millions of Pounds)			
Urethanes	165	80	45	8
Carbamates	25	16	6	5
Polycarbonates	30	6	1	*
Miscellaneous	10	6	5	4
Total	230	108	57	17

*Small

Phosgene, Now a Respectable Chemical Building Block, Seen At 230 Million Pounds in '65

OPD Special Report

Phosgene, known since its deadly military application in World War I chiefly as poison gas, is suddenly gaining respectable status as a vital chemical building block. This material, which once drove fearful troops to cover with its deceptive new-mown hay smell, promises to reach a market volume of 230 million pounds annually by 1965. Output in 1957, the first year that the Tariff Commission started reporting production, was only 5 million pounds. This year, production should pass the 57-million-pound mark.

At the same time, phosgene capacity, which was about 56 million pounds in 1958, should reach 122 million pounds this year. In 1962, at least 221 million pounds of capacity should be in place.

Expansion Reason Pinpointed

Chief reason for this sudden burgeoning of phosgene capacity is an industry-wide hike in capacities for toluene diisocyanate, starting point for polyurethane resins.

As a result of planned boosts in TDI potential, the following producers are expected to expand phosgene capacities:

- E. I. duPont de Nemours & Co.—whose Chambers Works plant at Deepwater, N.J., is now capable of making about 25 million pounds a year of TDI—will boost output to about 40 million pounds by mid-1961. Need for phosgene: 60 million pounds a year by then.
- National Aniline Division of Allied Chemical Corporation is expanding its TDI plant at Moundsville, W. Va., to 25 million pounds a year. This means the company will need 40 million pounds a year capacity for phosgene when the expansion is in.
- Mobay Chemical Company will have 40 million pounds of TDI capacity in place by the middle of next year. Mobay's phosgene requirements for TDI will be in the neighborhood of 60 million pounds, but other needs will probably hike phosgene capacity even higher—probably to 65 million pounds.
- Nopco Chemical Company plans to put up a 10-million-pound plant somewhere in New Jersey. The plant will need a 15-million-pound-a-year phosgene unit.

Thus, these four projects alone will be responsible for 57 million pounds of additional phosgene potential over the next two years.

In addition, Carwin Company and Ott Chemical Company consume phosgene in

—Continued on page 30

PHOSGENE OUTPUT

1965 . . .	*230 million lbs.
1962 . . .	*108 million lbs.
1960 . . .	*57 million lbs.
1959 . . .	37 million lbs.
1958 . . .	9 million lbs.
1957 . . .	5 million lbs.
1956 . . .	*3 million lbs.

*Estimate

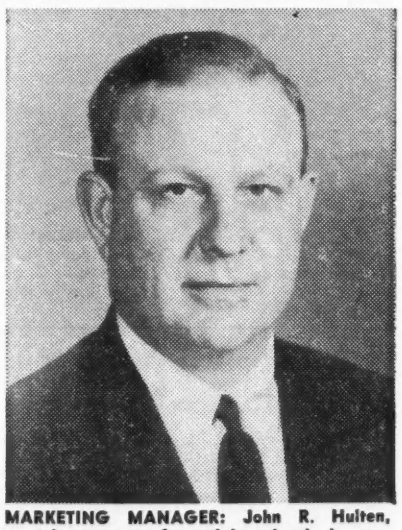
Source: Tariff Commission

Space Chemicals: What's the Market? Small Today, But Potential Is Great

What's the market for chemicals in outer space? Smallish right now, but growing—and the potential is enormous. So it would appear, at least, from a panel on space chemicals conducted last week by the Manufacturing Chemists' Association at its semi-annual meeting in New York. Take liquid propellant requirements, for instance. A. L. Antonio, vice-president of Aerojet General Corporation, Azusa, Calif., figures that a total of 6,220 tons of liquid hydrogen alone will be needed in 1965.

That this is a very conservative estimate is pointed up by the fact that National Aeronautics & Space Administration has invited bids on the production of 11,500 tons of liquid hydrogen a year to meet 1964 requirements of the nation's missile programs.

Other reports on the semi-annual meeting of the Manufacturing Chemists' Association appear on pages 4 and 5.



MARKETING MANAGER: John R. Hulten, named manager of specialty chemicals marketing for Union Carbide Chemicals Company, division of Union Carbide Corporation, New York.

Mr. Antonio's figures are for chemical rockets alone and do not allow for a nuclear rocket—which is expected by '64—nor for the fact that more than one liquid hydrogen rocket will be under development four years hence.

In estimating 1964 requirements, the Aerojet executive has taken into account the amount of liquid propellant he thinks will be needed for space vehicles, ICBM's, pre-flight check-out testing and for development and qualification.

Mr. Antonio believes that a total of 62,800 tons of liquid oxygen will be required for the nation's chemical missile program by 1965.

Other propellant needs, he feels, will include: kerosene (RP-1), 13,500 tons; nitrogen tetroxide, 28,890 tons, and hydrazine-unsymmetrical dimethylhydrazine, 14,060 tons.

To snag some of this lush market, the industry may have to take a radically new tack on chemical processes for new propellants. That's the opinion of Paul M. Terlizzi, assistant to the research vice-president of Stauffer Chemical Company, New York.

For one thing, he thinks the industry

—Continued on page 54

Chemical, Drug Block Another One for GATT

Another group of chemicals and drug products is being placed on the tariff trading block by the government for consideration at Geneva next January. That is when negotiations will get under way among the members of the General Agreement on Tariffs & Trade (GATT) for the next round of worldwide tariff reductions.

A supplemental list of about 200 products, containing more than a score of items in the chemical field—some on which duties are imposed under the 1930 tariff law and others on which no duties are assessed—was issued last week by the Department of State.

The announcement was coupled with invitations to industry from the committee

—Continued on page 46

Parke-Davis, Jap Company Enter Drug Pact in Tokyo

Parke-Davis & Co., Detroit, Mich., has established a jointly-owned pharmaceutical firm at Tokyo, Japan, with Sankyo Kabushiki Kaisha, of that city. The new concern will be known as Parke-Davis & Sankyo Kabushiki Kaisha.

Operations will begin immediately with an initial capital of 35 million yen, ac-

—Continued on page 45

Borden, US Rubber Set For Hydrocarbon Venture

Borden Company and United States Rubber Company have just given the green light for their long-rumored hydrocarbon venture. The two firms have acquired an 850-acre site near Geismar, La., in the Baton Rouge area, and will start construction immediately on a $50-million chemical plant complex.

As predicted in a "Depth Report" (OPD, 10/24/60), the new facilities will turn out 150 million pounds of vinyl chloride monomer yearly. Also planned is capacity for 80 million pounds of acetylene yearly.

The plants will be operated by Mono-

—Continued on page 54

FD&C Red No. 1: The Dye Has Had It

FD&C Red No. 1—one of the three most important of the red coaltar colors—has had it! Food & Drug Administration has just removed the dye from the certification list for use in food, drugs and cosmetics.

In signing the delisting order last week, Deputy FDA Commissioner John L. Harvey said that the action was taken because preliminary experiments have shown that the color produces liver damage in test animals and no safe use level has been established.

The action was not unexpected by producers and consumers of the dye. A tip-off to the likely de-listing order came at the November 17 meeting of FDA officials with industry, where it was disclosed that preliminary evaluation of laboratory tests was giving rise to grave questions

—Continued on page 47

DEVELOPMENT DIRECTOR: Gerald J. Bayern, formerly manager of market research for the chemical group of W. R. Grace & Co., who has joined Bzura Chemical Company, Keyport, N.J., as director of commercial development.

Quinidine: Who Wants Some? Gov't Has Enough

General Services Administration is cutting back the size of the national stockpile of quinidine by 453,000 ounces after a survey of supplies in the light of probable needs.

In an announcement to the trade last week, GSA said that it plans to dispose of this quantity of the material as being excess to stockpile requirements. It carefully pointed out that it does not represent the total government-owned inventory of the commodity.

The 453,000 ounces will be eligible for intra-governmental transfer or sale at the end of six months, in accordance with the requirements of the stockpile law that governs how excess accumulations in the inventory are to be reduced.

However, it was added by GSA, that no more than 100,000 ounces will be offered at one time and there will be an interval of at least six months between each offering.

The first of these offerings will be made after expiration of the six-months waiting period required between official announcement of the disposal plan and the time a disposal actually can be started.

GSA, which administers the stockpile program, also has said that small business firms will be given every opportunity to participate in the purchase of the excess quinidine. To encourage this participation, the agency intends to allot the material so bids can be made on as little as 1,000 ounces.

Chemicals Being Poached On? Maybe Its the Industry's Fault

If the chemical industry's preserve is being poached on by other industries these days, the trouble may be that the chemical makers themselves have been in too frantic a rush to diversify. So thinks Allied Chemical Corporation's I. H. Munro, who wonders whether the time may not be at hand for a return to "Shoemaker, stick to your last!" Mr. Munro's concern is with the alarming profit erosion that has taken place against this year's rising sales volume. Overcapacity and the resulting price cutting, he thinks, can be traced to the current trend for companies to spread their operations too thinly and in too many directions.

This applies to chemical makers as well as to firms branching into the chemical business, Mr. Munro declared last week.

In a talk before Manufacturing Chemists' Association in New York, he argued that by spreading itself thin, a chemical firm was failing to reap the full benefit of its experience and know-how in its own specialty and thereby inviting competition.

Other reports on the semi-annual meeting of the Manufacturing Chemists' Association appear on pages 3 and 5.

"I think we will have to resolve to do such a good job in our own bailiwicks, where we have over the years paid for our experience and know-how," he said, "that our specialty doesn't appear vulnerable to a company with money to invest in chemicals."

Instead of looking for greener pastures, he suggested that the industry focus its efforts on these goals:

- Move products out of the laboratory and up to tankcar quantities far faster than the traditional average seven-year period.
- Sharpen up market intelligence. "More and more we're going to have to look over our customers' shoulder and learn about basic consumer preference."

Mr. Munro, Allied's vice-president of marketing, presented this viewpoint during a panel discussion of "Chemical Marketing—A Reappraisal in the Light of World Conditions."

Kicking off the panel, Bert Cremers, vice-president of Wyandotte Chemicals

—Continued on page 49

Nat'l Starch on Stream With New Polymer Unit

National Starch & Chemical Corporation's 14-million-pound polyvinylidene chloride resin plant at Meredosia, Ill., is now "on stream," turning out amounts of "Resyn 3600," an aqueous dispersion of vinylidene chloride copolymer.

While under development for more than five years, "Resyn 3600" was only revealed commercially in May of this year. It offers exciting possibilities for packaging, surface coating, and construction material.

Polyvinyl Fluoride Set To Have a New Home

E. I. duPont de Nemours & Co., Wilmington, Del., is planning to build a plant at Buffalo, N. Y., for the production of its "Teslar" polyvinyl fluoride film on a commercial scale.

The new film, researched and developed by duPont for the past eight years, has been under semi-works production at the company's Yerkes Research Laboratory in Buffalo.

DuPont's engineering department, which has designed the facility, will start construction early next year. Start-up is expected in mid-1962.

"Teslar" is said to show outstanding weatherability, toughness and chemical inertness. It can be made either clear and transparent, or in opaque, pigmented form, with either glossy or satin surface, duPont says. Reportedly the film can be readily vacuum-formed, drawn, metallized, heat-sealed and adhered to other materials.

These properties are expected to open up applications in the construction indus-

—Continued on page 32

Linde Opens Oxygen Unit For Michigan Steel Maker

Newest addition to the ranks of on-site oxygen plants serving the steel industry is a 500-tons-a-day facility, just dedicated by Linde Company, a division of Union Carbide Corporation, at Great Lakes Steel Corporation in Ecorse, Mich.

The Ecorse plant is the third major steel industry installation completed by Linde so far this year. This brings the company's total on-site oxygen capacity for steelmaking to 3,623 tons a day.

Norda Plant, Hit by Fire, Is Back in Full Production

Norda Essential Oil & Chemical Company is back in full production at its Hanover, N. J., cosmetic ingredients plant following a spectacular but quickly-quelled blaze.

The fire broke out in the plant's mixing department at November 18, and was brought under control within two hours. There were no injuries, and the plant was in partial operation the following day. Full production was reached early the next week.

Quick action by firemen in wetting down hundreds of nearby drums of oils and chemicals helped prevent spread of the blaze and any curtailment of shipments, a spokesmen for the company noted.

The Week's Price Changes

Cedarwood Oil, Chenopodium Oil, Corn Oil, Lard Advanced. Castor Oil, Cocoa Butter, Cottonseed Oil Foots Reduced.

Prices Advanced

Cedarwood oil, 10c. per lb. (p. 48).
Chenopodium oil, 20c. per lb. (p. 48).
Citronella, Java-type, 9c. per lb. (p. 48).
Corn oil foots, 95%, ½c. per lb. (p. 50).
Grease, choice white, ¼c. per lb. (p. 50).
Lard, cash, 3.20c. per lb. (p. 50).

Prices Reduced

Castor oil, No. 1 Braz., ¼c. per lb. (p. 50).
Cocoa butter, ½c. per lb. (p. 50).
Cottonseed oil foots, 95%, ¼c. per lb. (p. 50).
Peanut oil, crude, ¼c. per lb. (p. 50).
Refd., ½c. per lb. (p. 50).
Soybean meal, $1 per ton (p. 50).
Soybean oil, crude, ⅛c. per lb. (p. 50).
Refd., ¼c. per lb. (p. 50).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Nov. 25, 1960	Nov. 18, 1960	Nov. 28, 1959
108.60	108.57	109.65

Delaney Clause Need: A Change

The Delaney cancer clause should be modified "to restore the Food & Drug Administration's right to exercise scientific judgment." Such is the opinion of Thomas P. Carney, vice-president in charge of research, development and control for Eli Lilly & Co., Indianapolis, Ind. "It would be a serious consequence," according to Dr. Carney, if the public were denied the benefit of safe and valuable products" because of the rigid interpretation of the Delaney clause.

Dr. Carney gave his opinions last fortnight in Kansas City, Mo., at a symposium on food additives held during the twelfth annual chemistry conference sponsored by the Kansas City section of the American Chemical Society.

Delaney Clause 'Inflexible'

The speaker termed the Delaney clause an example of inflexible legislation which unnecessarily restricts research. He said he felt the clause eliminates the element of scientific judgment in evaluating chemicals through its ban of materials that can be made to cause cancer experimentally in test animals under conditions and in amounts totally unrelated to the substances' intended use.

Further backing up his position, Dr. Carney said that a free exchange of scientific information between scientists in government and scientists in industry is more important now than ever before.

"Progress in making new chemicals and drugs available for the benefit of the public" will best be served by such an exchange, Dr. Carney added. Also on the same program was Dr. Paul R. Cannon, chairman of the department of pathology of the University of Chicago. He told his audience the Delaney clause "changes a scientific problem into a legal operation," adding that the law, though laudable in intent is based on certain assumptions that may require years to validate or refute."

BAXTER LABS CHAIRMAN: Ralph Falk, 2nd, elected chairman of Baxter Laboratories, Inc., Morton Grove, Ill., to succeed his late father, Dr. Ralph Falk.

Polio Standards Published

Official standards to be followed by manufacturers in the production and testing of live polio vaccine were published in the *Federal Register* November 23 by the Public Health Service. Interested persons were given thirty days in which to submit views and arguments in writing on the standards to the Surgeon General for consideration before making the standards final.

Phthalic Spread Narrows As Allied Price Goes Up

The price spread in phthalic anhydride narrowed last week as the plastics and coal chemicals division of Allied Chemical Corporation, New York, announced a 1 cent across-the-board increase. Effective immediately on spot and January 1 on contract, Allied's new tankcar price is 19½ cents a pound.

The previous market spread of 18½ to 22½ cents a pound in tankcars is now shaved to a 3-cent differential. In the same announcement, Allied also disclosed that Detroit, Mich., is to be eliminated as an equalization point for shipments of phthalic.

Index to News and Market Reports

Association News

Callison Man to Speak to Flavor Chemists 7
Chemical Patents Advice Given 5
Chemical Sales Estimate for '60 5
Griffith to Get Remington Medal 7
FMA to Weigh Public Responsibilities 7

Government News

Chemicals, Drugs Added to GATT List 3
Drugs for Stockpile to Move Via PHS 7
FDA Law Enforcement to Be Selective 5
FD&C Red No. 1: The Dye Is Cast 3
Gibberellic Acid Salt Okayed by FDA 42
Lead, Zinc Quotas Upheld 7
Polio Standards Published 4
Quinidine Sale Planned by GSA 3
Rayon Imports Under Study 34

Industry News

Ansco Division Acquires Grant Photo 42
Atlas to Close Dynamite Plant 5
Borden, US Rubber in Joint Venture 3
Celanese Plastics Heading West 5
Chemical Diversification Trend Scored 4
Chemical Projects Firm Incorporates 32
Delaney Clause Need: A Change 4
Fluoridation Strikes Out at Polls 5
Heyden, Nuodex in Western Sales Move 46
Imperial Adhesives Starts New Plant 38
Linde Opens Oxygen Plant 4
Monsanto Building Pesticide Unit 5
National Starch Unit on Stream 4
Norda Unit Back in Full Production 4
Polypropylene Fiber Output Planned 5
Phosgene 'Depth' Report 3
Phosgene Market Boom Building 3
Phosgene Output Charted 3
Phosgene Producers, Plants Listed 30
Phosgene's End-Uses Growing 3
Phthalic Price Spread Narrows 4
Polyvinyl Fluoride Unit Set by duPont 4
Space Chemicals Long on Potential 3
TDI Production: Big Increase Seen 53
Warwick Has New Microcrystalline Wax 46

International News

Britain's Plastics Crisis Reviewed 7
Chemical Overseas Markets Listed 7
Montecatini Pacts Approved by Tokyo 5
Parke-Davis, Jap Firm in Drug Pact 3
Soviets Shop for Chemical Savvy 5
Yugoslavs' Choice Is Superphosphate 7

Personnel News

Bzura Names Bayern 3
Columbia-Southern Appoints Brown 7
Falk Is Baxter Labs Chairman 4
F. H. Ross Advances Englund 5
GAF Unit Appoints Hyatt 5
Gulf Elevates Peters 42
Union Carbide Appoints Hulten 3

Market Reports

Acids 31
Adhesives 53
Agricultural Chemicals 35
Aliphatic Organics 36
Aromatic Chemicals 48
Botanical Drugs, Gums 44
Coal Chemicals 40
Coatings Materials 39
Drugs 44
Essential Oils 48
Fats & Greases 52
Fertilizer Materials 49
Fine Chemicals 44
Heavy Chemicals 31
Industrial Organic Chemicals 36
Metals, Nonferrous 31
Naval Stores 40
Oil Cake and Meal 52
Oils 50
Paint Materials 39
Pesticides 49
Petrochemicals 36
Petroleum Derivatives 53
Protective Coatings Materials 39
Spices 48
Trade Name Chemicals 53
Waxes 52

General Features

Advertisers' Index 58
Association Meeting Dates 7
Bids Wanted 53
Chemical Production: September 29
Classified Advertisements 58
Coal Chemical Output 40
Crude Oil Stocks 53
Current Market Quotations 8
Editorials 29
Imports 50
Obituaries 45
OPD 'Depth' Report: Phosgene 3
OPD Price Index 4
OPD Reports from Europe 7
Washington Talks It Over 29

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MARKETING DIRECTOR: Robert C. Hyatt, appointed director of marketing for the Collway Pigments Division of General Aniline & Film Corporation, New York.

Polypropylene Fibers: A Hercules Conversion

Hercules Powder Company has picked up the Industrial Rayon Corporation plant in Covington, Va., and intends to convert it to the output of polypropylene fibers. To do so, the Wilmington, Del., purchaser has formed a new fiber development department to handle operations and has named Forest B. Evans as its head.

Hercules says it will convert the nylon section of the Covington plant to the spinning of polypropylene fibers, with an annual capacity in excess of 10 million pounds. The converted facilities will be used to produce textile staple and continuous multifilament yarns from Hercules "Pro-fax" crystalline polypropylene.

Industrial Rayon has announced that it is consolidating its rayon fiber production at Painesville, Ohio, resulting in a complete shutdown of operations at Covington.

As news of the purchase was announced, A. E. Forster, Hercules' president, was quick to emphasize that his company does not intend to enter the nylon or rayon fiber fields.

He added that Hercules has no plans to manufacture heavy denier monofilaments which are already well-established commercially by several Hercules polypropylene resin customers.

The new fiber development department will, as the name indicates, be a development group as distinguished from the company's eight operating departments.

"The activities of the fiber development department will be directed toward the evaluation and development of markets for polypropylene staple and filament

—Continued on page 42

Atlas Powder Will Close Its Senter Dynamite Plant

Atlas Powder Company will close its Senter dynamite plant near Houghton, Mich., effective December 16. Earlier this year, the Wilmington, Del., company closed another dynamite facility at Richmond, Calif.

The latest closing, Atlas says, will be the "final phase of the company's plan to consolidate all its explosives manufacturing facilities at fully-integrated ammonium nitrate and dynamite plants." The company has two such plants at Tamaqua, Pa., and Joplin, Mo.

The policy results from the company's appraisal of the effect of ammonium nitrate displacement of dynamite in a large part of the industrial explosives market.

FDA Won't Use a Shotgun In Enforcing Delaney Clause; It Will Shoot a Little Sharper

Food & Drug Administration has no intention of using the shotgun approach in enforcing the Delaney anti-cancer clause of the color additives law. The agency in its enforcement activities will give primary consideration to the use-conditions of the additive. And, the fact that a substance can be made to produce cancer in laboratory animals under one set of circumstances will not automatically rule out the additive for use under an entirely different set of conditions.

Deputy FDA Commissioner John Harvey said last week that there is a mistaken notion among producers and users of additives that the Delaney clause acts to bar a substance from use in a food, drug or cosmetic simply because it is capable of producing cancer "by any route of administration."

'By Any Route' Is Out

The "by any route of administration" rule is out, he said. This is not the way the clause is being interpreted, he added, because any such interpretation could lead to "ridiculous situations" since it is quite possible to produce cancer in a laboratory with many substances which no one would accept as carcinogens.

FDA is making an attempt to clarify this area of misunderstanding in the proposed color regulations now being reviewed by industry.

Because so many "people have been asking whether a skin product has to meet a swallowing test" to clear the Delaney clause hurdle, Mr. Harvey explained, the agency has gone to some length to assure them in the regulations that it does not.

He added that this interpretation of the law is spelled out in more detail in the color regulations than in the food additives regulations, but the policy is the same.

This is what the newly-drawn-up color regulations have to say about application of the anti-cancer clause:

"(a) With respect to color additives that may be ingested.

"Whenever the scientific data before the commission (either the reports of the scientific literature or the results of biological testing) suggest the possibility that the color additive or any of its components or impurities has induced cancer when ingested by man or animal, the commissioner shall determine whether, based on best judgment of appropriately qualified scientists, cancer has been induced and the color additive or its components or impurities was the causative substance.

"If it is his best judgment that the data do not establish these facts, the anti-

—Continued on page 38

ROSS & CO. VICE-PRESIDENT: Gosta Englund, elevated from general manager of national sales to vice-president by F. H. Ross & Co., Charlotte, N.C., chemical distributor.

Soviets Still Looking For Chemical Savvy

Soviet bloc interest in acquiring US know-how in the fields of chemicals, petrochemicals, textiles and rolling mills shows no signs of diminishing. So reports Secretary of Commerce Frederick Mueller.

Last week the secretary said that US firms are continuing to seek the view of the government on the desirability of furnishing technical data and/or equipment and material for construction of facilities of strategic importance to Soviet bloc destinations.

In his fifty-third quarterly report on export control operations, covering the third quarter of this year, Mr. Mueller disclosed that eighteen export applications were approved during the period, one more than in the previous quarter, covering shipment of technical data to Eastern European destinations.

The majority of the applications were submitted, it was explained, in order to provide quotations or offers to inquiries received directly from Soviet bloc countries, or on the use of US-origin technical data.

Included among the applications were two in the chemical field—one covering a

—Continued on page 32

Monsanto Commences Work On a New Pesticide Facility

Monsanto Chemical Company has construction under way at Monsanto, Ill., on a new unit for manufacture of 2,4-D and 2,4,5-T esters for broadleaf weed and brush control.

Scheduled to come on stream in January, the facility is designed to produce these esters in further improved quality and will assure the reserve capacity necessary to meet peak season customer demands, according to Monsanto.

Celanese Plastics to Have Its First Unit on West Coast

Celanese Plastics Company, a division of Celanese Corporation of America, will extend its manufacturing operations to the west coast with the leasing of a plant for production of blow-molded polyethylene containers.

Located in Alta Loma, Calif., thirty-five miles east of Los Angeles, the plant will turn out plastic containers for detergents and other household and industrial items.

Production of polyethylene containers has more than doubled in the past two years, a spokesman for Celanese Plastics notes. He predicts that volume will rise to an annual rate of more than 2 billion units during the next five years. About 80 percent of all liquid detergents are now being packaged in polyethylene bottles, he estimates.

Celanese entered this field a year ago when the parent company acquired Royal Manufacturing Company, with plants in Prescott, Ariz., and Chicago.

Chemical Patents: They're Not Easy Or Always Good

Obtaining an overseas chemical patent isn't always easy, and isn't always worthwhile. So diverse are the regulations and procedures involved that it would be well for an American company with a large volume of patented inventions to set up a regular screening system to determine when and which foreign patents should be sought.

Such is the advice of D. C. Harrison, general patent counsel for Union Carbide Corporation. His remarks were heard by Manufacturing Chemists' Association in New York last week in a panel discussion on current problems in foreign patents.

Other reports on the semi-annual meeting of the Manufacturing Chemists' Association appear on this page and on pages 3 and 4.

Mr. Harrison estimated that an effective screening system would cut foreign patent costs by 25 percent—without passing up important foreign possibilities. A good system would provide answers to the following questions, he said:

- Will the invention be of enduring importance? (The hardest question, according to Mr. Harrison).
- Where, overseas, will it be of importance?
- What are your changes of making profitable use of a patent in a selected country?

Because foreign patents are subject to progressively higher taxes as they age, they require periodic review, Mr. Harrison noted.

"For the first five years of its life," he noted, "the annual taxes on a foreign patent do not amount to much, so that during this part of its life, review is only to find obvious duds and need not take much time.

"From then on, taxes increase progressively, usually year by year, calling for a harder and harder look. Some companies make an annual review, others every two or three years."

Turning to questions raised by formation of the new European trade blocks, Mr. Harrison called attention to the diversity of patent policies now prevailing in

—Continued on page 58

Montecatini Pacts Get Okay by Japanese Gov't

The Japanese Government has approved license agreements between Montecatini of Italy and two Japanese chemical firms —Mitsui Chemical Industry Company and Mitsubishi Petrochemical Company, both of Tokyo—for production of isotactic polypropylene for plastic uses, transparent films and textile fibers.

The Italian company, which was reportedly the first in the world to start industrial production of isotactic polypropylene back in 1957, will supply processes and technical assistance to both companies.

Montecatini earlier concluded polypropylene contracts with Imperial Chemical Industries, Ltd., of Great Britain, Royal Dutch Shell, and two French companies, Pechiney and Societe Normande de Matieres Plastiques.

Flouridated Water Issue A Washout At the Polls

It was a washout for fluoridated water in sixteen communities that had the dental health issue on their election day ballots.

Returns trickled in as slowly as the California absentee ballot count, but the final tally last week added up to a minor landslide for the anti-fluoridation forces.

Cincinnati, Ohio, largest city voting on the measure, turned it down 107,782 to 83,685. In nearby Kenton County, Ky., it failed by 17,690 to 10,621.

Nothing was gained, but nothing was lost either for proponents of fluoridation. About 44.5 million people are using fluoridated water, as of a government tally on August 2 of this year.

Chemical Sales to Hit $28 Billion This Year: MCA's Hull

In the eyes of John E. Hull, things are looking up in the chemical business.

The Manufacturing Chemists' Association president told his annual meeting early this year that sales of chemicals and allied products were expected to hit $27 billion. Last week, before the semi-annual meeting and mid-year conference in New York, he said that he had revised his opinion: better than $28 billion this year.

That, remarked the association official, will be 9 percent over the record performance of last year.

But, there is a fly in the ointment. Mr. Hull noted dismally that while the outlook for sales is good, the industry is faced with the problem of increasing costs without corresponding price increases.

"As a result," he said, "profit margins throughout the industry may not be providing sufficient incentive for re-investment of capital. This trend must be reversed if the chemical industry is to meet the requirements put on it by an expectant public."

Then, turning from the sales and profits picture, Mr. Hull gave his attention to relations with officialdom. This is the way he sized it up for his associates:

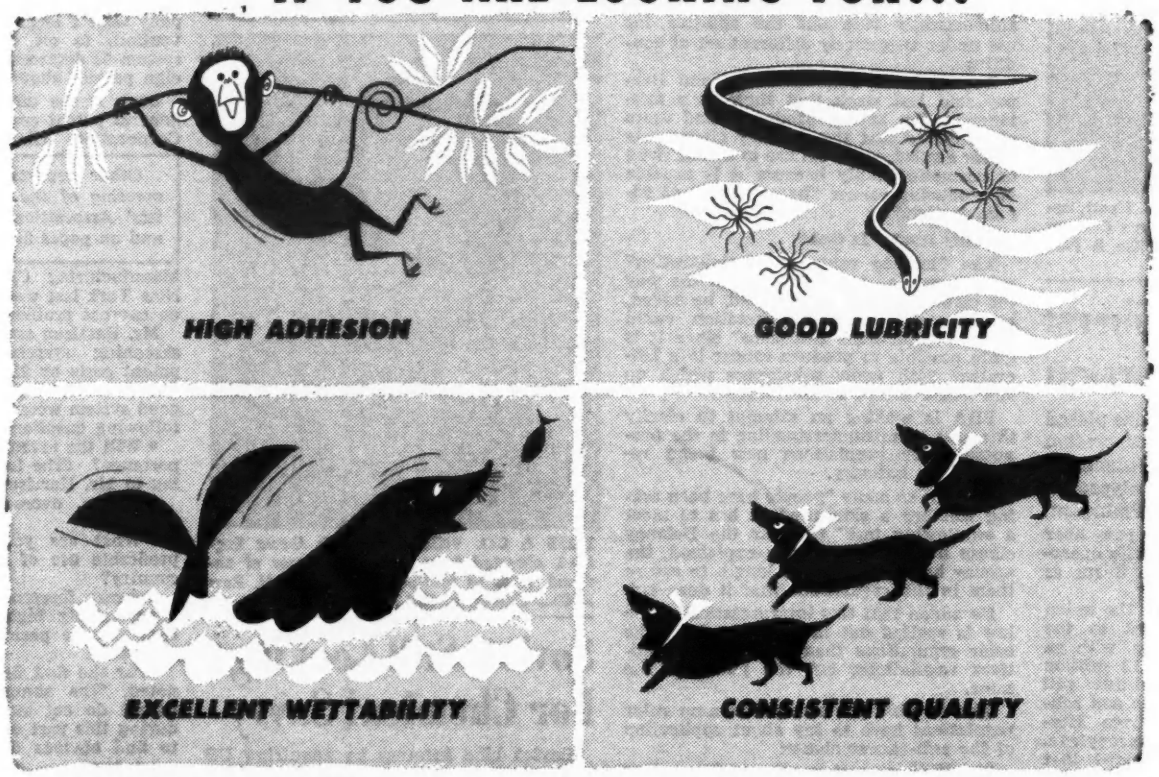
"In looking at what's ahead for the chemical industry, I know of no area in which there is as much uncertainty as in the field of industry-government relations."

The speaker said it was his guess that

—Continued on page 42

Other reports on the semi-annual meeting of the Manufacturing Chemists' Association appear on this page and on pages 3 and 4.

IF YOU ARE LOOKING FOR...



INVESTIGATE CSC's NEW SYNTHETIC WAXES

NOW COMMERCIALLY AVAILABLE

TX-1 and TS-254 have made the grade from laboratory to plant production. They are oxazoline waxes—an entirely new product series from CSC's Nitroparaffins. Since they are synthetic, availability and consistency of quality present no problems.

TX-1 is a hard, high-melting emulsifiable resin-like wax, light brown in color, translucent in appearance.

TS-254 is a hard, medium-melting, cream-colored wax.

ATTENTION AEROSOL FORMULATORS: These waxes form true solutions in many organic liquids thus greatly simplifying aerosol formulation problems. No settling in the can! No clumps to block the orifice!

The oxazoline structure is unique among waxes, both natural and synthetic. From it comes *high adhesion, good wetting on hard surfaces* and *good lubricity. These waxes are compatible with most natural and synthetic waxes.* Stable gels or pastes are formed when they are dissolved in high concentrations in many organic liquids.

Because of these properties, TX-1 and TS-254 are expected to be useful in self-polishing floor waxes, paste polishes, leather, paper, and textile finishes, synthetic lubricants, metalworking lubricants, cosmetics, as mar-proofing agents in enamels, and as pigment grinding assistants.

There are four other oxazoline waxes also available. Let us discuss your specific problem and provide you with samples. Write on your letterhead to Market Development Department, Commercial Solvents Corporation, 260 Madison Avenue, New York 16, New York.

PHYSICAL PROPERTIES	TS-254	TX-1	ES-254	TS-254A	TS-254AA	TS-970
Melting point °C	63	160	37	50	93	74
Volume Expansion on melting—%	7.7	—	8.9	9.2	9.2	9.1
Penetration, ms/100 gm. load (ASTM D5-25)	0.2	—	1.3	0.3	0.4	0.1
Acid No. (approx.)	7	12	9	2	1-2	6
Solubility, % by wt. in:						
Butanol	7	49	50	22	13	4
Toluene	16	52	49	16	7	16
Carbon Tetrachloride	16	47	49	gel	14	gel
Stoddard Solvent	12	52	49	17	4	5
Butyl Acetate	11	55	49	13	9	6
Methyl Isobutyl Ketone	10	Ins.	49	10	8	5
Turpentine	21	10	24	21	10	10

COMMERCIAL SOLVENTS CORPORATION

Yugo Superphosphate Due

Yugoslavia, a Cold War equivocator, has at least made a firm decision on which of the plant food components represents the "wave of the future."

Back in 1952 the country's economic planners decided on a formula of one part nitrogen, to 1.2 of phosphorus and .8 of potassium.

This represented a major switch in favor of superphosphates, and the planners made their plans accordingly. They slated a 600,000-tons-a-year superphosphate unit at Prahovo, and geared it for a potential expansion to 1 million tons yearly.

Today, as the plant approaches the starting line for trial operations, the Yugoslavs estimate that they will have about 153,000 tons-a-year available for export after the unit is in full production during mid-1961.

This is based on domestic consumption of 667,000 tons, including 125,000 in mixed fertilizers, as against total output of 830,000 tons. About 400,000 tons will come out of the Prahovo unit during its first year of operations.

The Yugoslavs have announced no specific plans to market the excess production, but significantly, the matter is mentioned in their monthly export journal, *"Commercial Information."*

What's more, without reference to the wage rates commanded by "socialist" labor, they declare that the plant will turn out a particularly low-cost product, based on the use of byproduct sulfuric acid. The acid is obtained from processing of pyrites and copper at a nearby installation. All producing and storage equipment at the plant is fully up-to-

—Continued on page 51

Drug Firms Selling to Stockpile: You'll Be Shaking Hands With PHS

Drug firms supplying materials for the emergency medical stockpile will be dealing with the Public Health Service instead of the Office of Civil and Defense Mobilization in the future. Responsibilities for planning and operating the stockpile have been transferred to PHS in a step towards mobilization readiness under the National Health Plan. OCDM will retain jurisdiction only over questions of policy. The transfer of authority involves about $200 million worth of medical supplies and equipment located in thirty-three warehouses across the country.

CSMA AWARD WINNER: Ira P. MacNair, president of MacNair-Dorland Company, who will receive the 1960 achievement award of the Chemical Specialties Manufacturers Association at CSMA's annual meeting in Hollywood Beach, Fla., next week.

Included in the stockpile are 1,932 "packaged" 200-bed hospitals for civil defense emergency use, valued at $20,000 each. About 1,500 of these are now stored at strategic locations throughout the country and others are in use for demonstration purposes and for training personnel.

The Responsibility Is Broad

Stockpiling responsibilities of the Public Health Service, under OCDM policy control, will include procurement, maintenance, storage, inspection, quality control, distribution, utilization and property accountability of essential survival supplies and equipment.

The transfer of responsibility is consistent with other civil defense and civilian health mobilization assignments given

—Continued on page 58

Lead, Zinc Quotas Upheld

Going along with the Tariff Commission, President Eisenhower has decided against easing up the present import quotas on lead and zinc. The action was disclosed by the White House late Friday (November 25).

Griffith, Once PMA Head, To Get Remington Medal

Dr. Ivor Griffith, president of the Philadelphia College of Pharmacy & Science, has been chosen to receive the 1960 Remington Medal of the New York branch of the American Pharmaceutical Association. The medal will be presented at a testimonial dinner in his honor December 7 at the Roosevelt hotel in New York.

Dr. Griffith is a past president of PMA and fomer editor of the *American Journal of Pharmacy*. During the early days of World War II he founded the National Quinine Pool of the War Production Board.

OPD Reports From Europe

Britain's Crisis in Plastics Being Weathered by Makers With All Degrees of Success

Plastics producers are weathering the current British economic problems with varying degrees of success: Polystyrene has been most hurt by the sharp contraction in consumer durable and appliance sales; both polyethylene and polystyrene continue to fight cheap imports from non-British producers; while polyvinyl chloride apparently is unaffected and going at full capacity. In polystyrene, Shell Chemical is understood to be running at considerably less than its plant capacity of 18,000 tons a year. Other major producers are Monsanto Chemicals, Ltd., and Distillers Corporation, Ltd. Price reductions initiated by Shell in an attempt to stem the flow of cut-rate polystyrene imports have been only partially successful.

The British credit squeeze has knocked the domestic appliance business into a cocked hat. One big appliance maker has gone into bankruptcy with its stock plunging from $6 in January to about 20 cents.

ICI Cuts Polyethylene Price

Imperial Chemical Industries, Ltd., last week cut the price of polyethylene by a little over 4.5 cents a pound, to 25.5 cents. This is the fourth ICI polyethylene price slash since September, 1959, making for a total reduction of one-third over the two-year period. The British company says the move is aimed at stimulating sales.

Polystyrene has been enjoying large applications in moldings for refrigerators, TV sets and vacuum cleaners and the drop in sales of these appliances has hurt the plastic.

The main industrial application of polystyrene is foam insulation and this use is going well. Monsanto has announced start of production at a new plant for expandable polystyrene beads to be used for thermal insulation and packaging, and additional units will go on stream in 1961.

Monsanto also cut the prices of this

—Continued on page 34

DEVELOPMENT DIRECTOR: Thurman E. Brown, appointed director of development for Columbia-Southern Chemical Corporation's research and development laboratory at Corpus Christi, Tex.

PMA Meeting to Weigh Responsibilities to Public

Drug makers are preparing to examine the public responsibilities of their industry at a forthcoming eastern regional meeting and annual award dinner of the Pharmaceutical Manufacturers' Association.

The get-together is slated for December 12-14 at the Waldorf-Astoria hotel in New York.

Welcome and opening remarks will be delivered by John T. Connor, president of Merck & Co., and vice-president of PMA.

Papers to be heard during the first morning session are "Pharmaceutical Industry Profile," by Fred A. Coe, Burroughs Wellcome & Co., Tuckahoe, N. Y.; "The Pharmaceutical Industry Now," Samuel L. Stedman, Carl M. Loeb, Rhoades & Co., New York; and "Pharmacist and Manufacturer," Dr. William Apple, executive sec-

—Continued on page 49

Chemical Trade Winds How Will They Blow?

Using on-the-spot information supplied by its overseas officers, Department of Commerce has sketched in a picture of worldwide marketing prospects for chemicals and other materials.

A list, just published, shows the demand potential for individual chemicals in some thirty countries. It supercedes a list issued September 5.

Commerce advices that inquiries about countries cited should be addressed to any of the agency's field offices or to the

—Continued on page 42

Callison Man to Speak

Paul Tornow, director of research for I. P. Callison Company in Chehalis, Wash., will address the meeting of the Flavor Chemists Association to be held December 1 at the Russell Sheraton hotel, New York. Mr. Tornow will speak on peppermint and spearmint oils from Washington and Oregon from the standpoint of their production, their constituents as affected by growing conditions, and certain other factors.

Association Meetings

American Association for the Advancement of Science, annual meeting, Philadelphia, December 26-31.

American Chemical Society, national meeting, St. Louis, Mo., March 21-30.

American Institute of Chemical Engineers, Statler-Hilton hotel, Washington, D. C., December 4-7.

American Medical Association, committee on cosmetics, Chicago, December 29.

Association of American Soap & Glycerine Producers, annual meeting, Waldorf-Astoria hotel, New York, January 25-27.

Atomic Industrial Forum, annual conference, Fairmont hotel, San Francisco, December 14-16.

Chemical Buyers Group of the National Association of Purchasing Agents, midwinter conference, Commodore hotel, New York, February 2.

Chemical Specialties Manufacturers Association, annual meeting, Hollywood Beach hotel, Hollywood, Fla., December 5-7.

Drug, Chemical & Allied Trades Association, annual banquet, Waldorf-Astoria hotel, New York, March 2.

Electrochemical Society, Claypool hotel, Indianapolis, Ind., April 30-May 4.

Flavoring Extract Manufacturers Association, annual meeting, Savoy-Hilton hotel, New York, May 14-17.

Food Law Institute—Food & Drug Administration, annual conference, Auditorium of Department of Health, Education & Welfare, Washington, D.C., November 28-29.

National Drug Trade Conference, annual meeting, Gramercy Park hotel, New York, December 16.

National Pharmaceutical Council, annual luncheon, Pierre hotel, New York, December 15.

Northeastern Weed Control Conference, annual meeting, New Yorker hotel, New York, January 4-6.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 12-14; central regional meeting, Edgewater Beach hotel, Chicago, February 13-15; western regional meeting, Ambassador hotel, Los Angeles, February 20-21; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 30-May 3.

Plastics Exposition, sponsored by the Society of the Plastics Industry, Coliseum, New York, June 5-9.

Proprietary Association, small-volume forum, Biltmore hotel, New York, December 9.

Science & Food Symposium, sponsored by the Food Protection Committee of the National Academy of Sciences-National Research Council, Statler-Hilton hotel, Washington, D. C., December 8.

Society of Cosmetic Chemists, annual meeting, Biltmore hotel, New York, November 29.

Society of the Plastics Industry, reinforced plastics conference, Edgewater Beach hotel, Chicago, February 7-9; western section conference, del Coronado hotel, Coronado, Calif., April 20-21; national conference, Commodore hotel, New York, June 5-9.

Synthetic Organic Chemical Manufacturers Association, annual meeting, Roosevelt hotel, New York, December 8.

Technical Association of the Pulp & Paper Industry, annual meeting, Commodore hotel, New York, February 20-23.

Toilet Goods Association, scientific section's winter meeting, Waldorf-Astoria hotel, New York, November 30.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 9-11.

Water Pollution National Conference, sponsored by the Department of Health, Education & Welfare, Sheraton-Park hotel, Washington, D. C., December 12-14.

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, November 25 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13¼- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, comi., or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs.15.00 -20.25
tech., dms., c.l. dlvd ... 100 lbs.13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs.15.25 - —
tanks, dlvd. ..... 100 lbs.10.00 - —
USP, dms., dlvd ..... 100 lbs.13.00 -18.25
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib dms., l.c.l., dlvd ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib dms., l.c.l, dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd.. lb. .10½- —
dms., l.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., t.l., dlvd lb. .35 - —
dms., l.c.l. dlvd ..... lb. .36½- .37
tanks. dlvd. lb. .32 - —
Acetophenetidin, USP, 200-lb. dms., 1.000 lbs., frt. alld lb. 1.20 - —
100-lb dms., 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, cns., dms ..... lb. .42 1.30
Tech., dms., c.l., works ..... lb. .47 - —
dms., l.c.l., works ..... lb. .47¼- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.24 - —
dms., 5,000-lb. lots, same basis lb. 1.30 1.45
dms., smaller lots, same basis lb. 1.35 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 - —
cs., l.c.l., ex whse ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd. (60 mesh), 250-lb. dms., c.l., pt. of shipt lb. .56¼- —
USP, 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb. higher.)
Freight equald, shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS
Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .36 - —
dms., l.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. .42½- —
dms., l.c.l., l.t.l., dlvd ..... lb. .43½- —
tanks, dlvd. ..... lb. .40 - —
tech., esterification, dms., t.l., frt. prepaid lb. .41½- —
tanks, same basis ..... lb. .39 - —
tech., polymerization, dms., t.l., f.o.b. shipping point lb. .42½- —
tanks, same basis ..... lb. .40 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.75 - 3.00
powd., 30 mesh., fib., dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis .. lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd lb. .99 - —
fib. dms., l.c.l., dlvd..... lb. 1.04 - —

ALCOHOLS
Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E of Rockies lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W of Rockies.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd..... lb. .32½- —
dms., l.c.l., dlvd..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs. or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4,950 lbs. works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs. works, lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd.... lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. ..... lb. 3.00 - 3.30
sweet, USP, cns., dms ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
		dms.	drums	ord.	ordinary
anhyd.	anhydrous	dom.	domestic	oz.	ounce
AOAC	Association of Official Agricultural Chemists	E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif.	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
Atl.	Atlantic	f.f.c.	free from chlorine	prod.	producer
Be.	Baume	fib.	fiber	pt.	point
bbls.	barrels	f.o.b.	free on board	pulv.	pulverized
bgs.	bags	f.p.a.	free of prussic acid	purif.	purified
bls.	bales	frt.	freight	redist.	redistilled
bots.	bottles	gal.	gallon	refd.	refined
b.p.	boiling point	gran.	granular	refy.	refinery
b.p.l.	bone phosphate of lime	grd.	ground	reg.	regular.
		i.&a.	iron and aluminum	resub.	resublimed
b.r.	boiling range			ret.	returnable
bxs.	boxes	l.b.p.	initial boiling point	SD	specially denatured
C.	centigrade	imp.	imported	s.d.	single distilled
cbys.	carboys	incl.	included	S E.	southeast
CD	completely denatured	indust.	industrial	sec.	secondary
		kgs.	kegs	secs.	seconds
c.i.f.	cost, insurance, freight	l-	laevo	s.g.	specific gravity
		lacq.	lacquer	shipt.	shipment
cks.	casks	lb.	pound	soln.	solution
c.l.	carlots	l.c.l.	less carlots	s.u.	standard unit
cns.	cans	l.t.l.	less truckload	syn.	synthetic
coml.	commercial	liq.	liquid	tanks.	railroad tankcars
conc.	concentrated	mfrs.	manufacturers	tech.	technical
CP	chemically pure	m-	meta	tert-	tertiary
cps.	centipoises	m.a.p.	mixed aniline point	t.l.	truckloads
cryst.	crystalline	min.	minimum	t.w.	tankwagons
cs.	cases	m.p.	melting point	USP	U. S. Pharmacopoeia
ctns.	cartons	N-	nitrogen		
cyls.	cylinders	n-	normal	vis.	viscosity
d-	dextro	nat.	natural	VM&P	varnish makers & painters
dbl.	double	neut.	neutral		
denat.	denatured	NF	National Formulary	W.	west
dest-dist.	destructively—distilled	NNR	New and Nonofficial Remedies	whse.	warehouse
dl-	dextro-laevo			w.w.	water-white
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. 35 - .40
powd. cs. ..... lb 60 - .65
Curacao, kgs. ..... lb. .78 - —
powd., kgs. ..... lb. .85 - —
Aloin, USP, bbls., dms., kgs... lb 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works 100 lbs. 4.30 - —
Lump, dms., works .....100 lbs 5.05 - —
Powd., dms., works.....100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works.....100 lbs. 5.30 - —
Powd., dms., works.....100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .0535- —
bgs., l.c.l., works..... lb. .056 - .0835
Aluminum acetate, basic soln., 24%, bbls., l.c.l, works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l., works 100 lbs.21.00 - —
dms., l.c.l., works ..... 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works .. lb. .0495- —
cbys., l.c.l., works..... lb. .0570- .1095
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l., works ..... lb. .17¼- .19¼
bulk, c.l., basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l., works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb lots same basis lb. .0395- —
bgs., 2,000-20,000 lb lots same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0330- —
Aluminum hydroxide, dried, USP XV fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
8-9½% Al_2O_3, fib. dms., works, lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb. lots, frt. alld lb. .2810- —
50-lb. pigs, 10.000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more.
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ..... ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald..100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld. lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld. lb. 2.15 - 3.85
p-Aminodiphenylamine, tech., soln., dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd. lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies .ton.92.00 - —
refrigeration, tanks, works, frt. equald, E. of Rockies ton.94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald..100 lbs. 8.25 - —
bgs., l.c.l., same basis..100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton.325 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs 21.15 - —
Ammonium bicarbonate, coml., dms., c.l., works..100 lbs. 7.00 - —
dms., l.c.l., works.....100 lbs. 9.00 - —

Ammonium bichromate, dms., works, lb. .42 - .49
Ammonium bifluoride, dms., dlvd lb. .3145 - .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½ - —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works, 100 lbs 6.00 - —
bgs., t.c.l., works 100 lbs. 8.00 - 8.45
USP gran. 250-lb dm lb. .17¼ - —
Ammonium citrate, dibasic, 250-lb. dm f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b works lb 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt alld lb. .20½ - —
dms., t.l.l. frt. alld lb .21½ - —
tanks, frt alld lb. .19½ - —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 - —
bgs., t.c.l., works 100 lbs. 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., 400 lb dms. 15,000-lbs works, lb 1.22 - —
400-lb dms., 2,000-lb contracts, works lb 1.23 - —
400-lb. dms. works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade 33.5% N. bgs. f.o.b works ton.67.00 - —
Ammonium nitrate, dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.64.00 - —
Ammonium oxalate, tech., fine gran., 250-lb dm., f.o.b works E lb. .28½ - —
Tech., powd., 200-lb. dm., same basis lb. .28½ - —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms. smaller lots, works lb. .20 - .23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald lb. .09¼ - —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼ - —
Ammonium silicofluoride, dms., works lb. .12¼ - .13¾
Ammonium sulfamate, bgs. c.l., t.l., works lb. .19 - —
bgs., t.c.l., works lb. .20½ - .27
Ammonium sulfate, standard granular, bulk f.o.b works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb bgs., f.o.b. works lb. .08½ - —
Large granular, bulk, c.l., works ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., t.c.l. t.l.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt equald., 100% basis, ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanide, tech., cryst., dms., c.l., works lb. .20 - —
dms., t.c.l., works lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼ - —
Ammonium thioglycolate, comi., 55-gal. dms., ton lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld. E. of Rockies lb. .18½ - .19
dms., t.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 - —
sms., t.c.l., dlvd. lb. .21½ - —
tanks, dlvd. lb. .16½ - —
tech., dms., c.l. dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Amyl acetate, syn., oxo process, dms., c.l., dlvd lb. .19 - —
dms., c.l., dlvd. lb. .20½ - —
tanks, dlvd lb. .16½ - —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., t.c.l., dlvd lb. .43½ - —
refd., ACS grade, dms., t.c.l., dlvd lb. .45½ - —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., t.c.l., frt. alld lb. .20½ - —
tanks, frt. alld. lb. .16½ - —
Amyl alcohol, primary, dms., c.l., frt. alld. lb. .20¼ - —
dms., t.c.l., frt. alld. lb. .21¾ - —
tanks, frt. alld. lb. .17¾ - —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., t.c.l., same basis lb. .20½ - —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., t.c.l., frt. alld. E. lb. .18½ - —
tanks, frt. alld E. lb. .14½ - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½ - —
dms., t.c.l., works lb. .43 - —
tanks, works lb. .39½ - —
2-pentanol, dms., c.l., works lb. .65 - —
dms., t.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .26¾ - —
dms., t.c.l., works lb. .27¾ - —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms. lb. 1.55 - —
Anethol, tech., dms. lb. .80 - .92
USP, cns., dms. lb. 1.05 - —
Angelica root, bls. lb .85 - .90
Angelica root oil, bots. lb.120.00 -140.00
Angelica seed oil, bots. lb.120.00 -130.00
Aniline dms., c.l., frt. alld. lb. .20 - —
dms., t.c.l., frt. alld. lb. .21 - —
tanks, frt alld. lb. .18 - —
Aniline oil (see Aniline).

Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld. lb. .28 - —
dms., t.c.l., same basis lb. .33 - —
Anise oil, USP, dms. lb. 1.75 - 3.00
Anise seed, Mexican, bgs. lb. .24 - —
Spanish, bgs. lb. .24 - —
Anisic aldehyde, dms. lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld. lb. .80 - —
dms., t.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½ - —
dms., t.c.l., minimum shipment 1,000 lbs., same basis lb. .43 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.13 - —
Anthraquinone, 99.5%, bgs., c.l., frt. alld lb. .70 - —
bbls., t.c.l., same basis lb. .73 - —
Electrical grade, bgs., t.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines, lb. .29 - —
cs., c.l., mines lb. .29½ - —
Antimony oxide, bgs., c.l., frt. alld, lb. .26½ - —
bgs., t.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, t.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½ - —
USP, powd., 250-lb dm., same basis lb. .74½ - —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .23 - .25
USP, powd., bbls. lb. .27 - .34
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
1-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
1-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
1-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents (see Solvent Naphtha petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½ - —
bbls., t.c.l. works lb. 06½ - .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.80.00 - —
7D, c.l (30 tons), mines ton.75.00 - —
7F, c.l (30 tons), mines ton.71.00 - —
7H, c.l (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF, c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF, c.l. (30 tons), mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 6.80 - —
dms., less than 100-kilos kilo. 7.05 - —
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 - —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09½ - —
emulsion, tanks, tankwagon, refy, gal. .09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. 5.75 - 7.50
Atropine sulfate USP, bots oz. 5.25 - 5.75
Azelaic acid, bgs., c.l., dlvd. lb. .40 - —
bgs., ton lots, same basis lb. .41 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units, 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs., smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton.176.00 - —
bgs., t.c.l., works ton.196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs., c.l., works, 100 lbs. 7.00 - —
bgs., t.c.l., works 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs., t.c.l., t.l., frt equald ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 - —
bgs., t.c.l., frt. equald 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., t.c.l., t.t.l., dlvd. lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald ton275.00 - —
dms., t.c.l., t.t.l., frt. equald ton.285.00 - —
Barium peroxide, dms., frt. equald. lb .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., t.c.l, same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19 - —
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., t.c.l., works ton.110.00 - —

Barytes, southern, off-color, bgs., mines ton.30.00 - —
85-75%, bgs., mines ton.30.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton.60.00 -60.23
paper bgs., ex whse., New York ton.84.85 - —
Battery acid, cbys., c.l., works E. 100 lbs. 2.35 - —
cbys, t.c.l., works, E 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.40 - 2.70
55-60%, cns. lb. 2.55 - —
NF, West Indian, 50-55%, cns. dms lb. 2.50 - —
Bayberry wax, bgs lb. .65 - .70
Beeswax, crude, African, bgs. lb. .54 - .55
Brazilian, bgs. lb. .58 - .59
Central American, bgs. lb. .54 - .55
Chilean, bgs. lb. .59 Nom.
Refd., USP, bleached white, bricks, 100-lb. ctns lb. .67 - .69
white, slabs, 100-lb. ctns lb. .66 - .68
yellow, bricks, 100-lb. ctns lb .59 - .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls. lb. .24 - .26
Belladonna root, bls. lb. .28 - .35
Bentonite, dom. 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 - —
bgs., 1-ton lots, ex whse ton.99.00 - —
Imp., Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 - —
bgs., 1-ton lots, ex whse ton.97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms lb. .80 - 1.05
Tech., dms., c.l., t.l. lb. .47 - —
dms., t.c.l. lb. .48 - —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La gal. .34 - —
Bethlehem, Pa gal. .34 - —
Birmingham district gal. .34 - —
Chicago district gal. .34 - —
Cleveland district gal. .34 - —
Geneva, Utah gal. .34 - —
Houston, Tex. gal. .34 - .40
Johnstown, Pa gal. .34 - —
Benzene, pure or nitration, tanks, works:
Lorain, Ohio gal. .34 - —
Middletown, Ohio gal. .34 - —
Mennequa, Colo. gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .34 - —
Port Arthur, Tex. gal. .34 - —
St. Louis, Mo. District gal. .34 - —
Sparrows Point, Md gal. .34 - —
Syracuse, N. Y. gal. .34 - —
Terre Haute, Ind gal. .34 - —
Youngstown, Ohio gal. .34 - —
Lackawanna, N. Y. gal. .34 - —
Lone Star, Tex gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0073 - —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065 - —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. .0075 - —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., t.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls, frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb 2.20 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 - .37
dms., t.t.l., same basis lb. .29 - .41
tanks, same basis lb. .21 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb. .50 - —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. lb. .32 - —
Benzophenone, dms lb. 1.35 - 1.40
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 1.93 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
cbys., t.c.l., same basis lb .23 - —
tanktrucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 1.08
Benzyl acetate, f.f.c., cns., dms lb. .54 - —
Benzyl alcohol, NF, dms. lb. .54 - —
Tech., dms., dlvd lb. .47½ - .65
Benzyl benzoate, USP, 40-lb. dms.lb. .62 - —
Benzyl chloride, tech., cbys., dms., c.l. works, frt equald lb. .22½ - .25½
cbys., dms., t.c.l., same basis lb. .23½ - .25½
tanktrucks, dlvd. Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.
Benzyl cinnamate, cns. lb 3.30 - 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld. lb. 1.25 - —
12-49 dms., same basis lb. 1.35 - —
1-11 dms., same basis lb. 1.90 - —
Benzyl formate, cns. lb. 1.70 - 1.85
Benzyl isoeugenol, cns lb. 8.20 - 8.30
Benzyl propionate, bots lb. 1.30 - 1.35
Benzyl salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns lb.56.50 - —
Berberine hydrochloride, bots lb.56.50 - —
Bergamot oil, nat., NF, Italian, cns. lb.11.00 -12.00
Betagammapicoline (see b.g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride tech.).
Biotin, cryst. bots gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil crude, cns lb. 1.50 1.90
Rectified, cns. lb 1.75 2.00
Bismuth chloride, jars lb 5.11 —
Bismuth hydroxide dms lb 4.60 4.65
Bismuth metal bxs. ton lots lb. 2.25 —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.25 - —

Bismuth oxychloride, 25-lb. dm., f.o.b. works lb 4.43 - —
Bismuth subcarbonate, USP 150-lb. dm lb 3.70 - —
Bismuth subgallate, NF, 200-lb dm., f.o.b. works lb. 3.98 - —
Bismuth subiodide fib dms lb 5.37 —
Bismuth subnitrate, NF, 300-lb dm., f.o.b works lb 3.15 - —
Bismuth subsalicylate, USP, 100-lb. dm, f.o.b. works lb. 4.15 - —
Bismuth trioxide, 100-lb. dms., f.o.b works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½ - —
bgs. c.l., t.l., less than 70,000 lbs., same basis lb. .30 —
bgs., t.c.l. same basis lb. .31 —
Blackberry root bark bls lb. .50 .55

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton.160.00 —
bgs., t.c.l., works ton.170.00 - —
bgs., t.c.l., New York whse ton.215.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton 5.50 —
Bloodroot, bls. lb. .85 .90

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb. 2.05 - —
Peruvian, dms. lb. 1.65 - —
BON acid maroons, pure, bbls lb 1.75 —
Resinated, bbls. lb. 1.50 —
Bone black, dms., c.l., frt. alld lb. .1750- .2225
l.c.l., works lb. .1950- .2425
Pacific coast bone black prices 3¼c. per lb. higher.
Bonemeal steamed works E ton.80.00 - —
Bone phosphate defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate tribasic)
Borax, tech. anhyd., 99½%, bgs., c.l., works ton.92.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs 7.42 - —
bgs., smaller lots, same basis 100 lbs 8.67 -10.97
bulk, c.l. works ton.83.00 —
Borax, tech., gran., decahydrate, 99½% bgs., c.l., works. ton.50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 - —
bgs. smaller lots same basis 100 lbs 6.57 8.57
bulk, c.l., works ton 43.50 - —
pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs 6.05 - —
bgs. smaller lots, same basis 100 lbs 7.30 9.30
bulk, c.l., works ton.58.00 —
USP powd., bgs. c.l., works ton.54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.45 - —
bgs. smaller lots, same basis. 100 lbs. 7.70 9.70
Bordeaux powder, tribasic bgs., c.l., dlvd lb. .24 - —
bgs., t.c.l., same basis lb. .26 - —
Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.62 - —
bgs., smaller lots, same basis, 100 lbs.20.87 -22.87
cryst. 99.9% bgs., c.l., works. ton.163.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.11.05 - —
bgs., smaller lots, same basis, 100 lbs.12.30 -14.30
Boric acid, tech., cryst., 99.9%, dms., c.l., works ton.188.50 - —
dms., ton lots, ex whse., New York or Chicago. 100 lbs.12.30 - —
bgs., smaller lots, same basis 100 lbs.13.05 - —
Boric acid, gran., 99.9%, bgs., c.l., works ton.112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 8.47 - —
bgs., smaller lots, same basis. ton.174.25 - —
dms., c.l., works ton.137.00 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.72 - —
dms., smaller lots, same basis 100 lbs.10.47 - —
bulk, c.l., works ton.106.00 - —
powd., bgs., ton lots, ex whse., New York or Chicago. 100 lbs. 8.85 - —
bgs., smaller lots, same basis 100 lbs.10.10 -12.10
Boric acid, powd., dms., smaller lots, same basis 100 lbs.11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., t.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., t.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½ —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., t.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 5-gal. cby., frt. equald lb. 1.95 - —
Bromstyrol, bots. lb. 5.25 - 5.35
Brucine, cns oz. Nominal.
Brucine sulfate, NF, cns. 1.45 1.75
Buchu leaves, bbls. lb. .70 - .75

BROWN PIGMENTS
Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy. lb. .21 • —
cyls., l.c.l., refy. lb. .22 • —
tanks, dlvd. lb. .12¾- —
Butene-1, tanks, works lb. .0625- —
Butene-2, tanks, works lb. .0570- —
n-Butyl acetate ferment, dms., c.l., frt. alld lb. .17 • —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
Syn., dms., c.l., dlvd. E lb. .17 • —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
sec-Butyl acetate, syn. dms., c.l., dlvd. E lb. .14¾- —
dms., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¼- —
n-Butyl acrylate, dms. c.l. or t.l., straight or mixed frt. alld. E lb. .42½- —
dms., l.t.l. same basis lb. .43½- —
tanks, same basis lb. .40 —

Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash

n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 • —
dms., l.c.l. frt. alld lb. .19½- —
tanks, frt. alld. lb. .15½- —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .18 • —
dms., l.c.l., frt. alld lb. .19½- —
tanks, dlvd. lb. .15½- —
Sec-synthetic, dms., c.l., dlvd lb. .15 • —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
n-Butyl alcohol, tert-synthetic, dms., c.l., frt. alld., dlvd E lb. .16 • —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½- —
dms., l.c.l., works lb. .38¼- —
n-Butyl ether, dms., c.l., works lb. .35¼- —
dms., l.c.l., works lb. .36 • —
tanks, works lb. .33¼- —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 • —
Butyl laurate, dms., works lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 • —
dms., l.c.l., works lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works lb. .32 • —
Butyl phenylacetate, dms. lb. 4.50 • 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Rockies lb. .27¼- —
dms., l.c.l., same basis lb. .28¼- —
Butylamine (see Mono-, Di- and Tri-butylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 • —
dms., l.c.l., same basis lb. .47½- —
tc., t.t., same basis lb. .45 • —
Butylated hydroxyanisole, food grade, dms., dlvd. lb. 4.75 • —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol)
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3 Butylene glycol, dms., c.l., t.l., dlvd lb. .20¼- —
dms., l.c.l., t.l.l., f.o.b. works lb. .22 • —
tanks, dlvd. lb. .18 • —
p-tert-Butylphenol, bgs., c.l., dlvd., lb. .27½- —
bgs., l.c.l., works lb. .28½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 • —
dms., l.c.l., dlvd. lb. .23½- —
tanks, dlvd. lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 • —
dms., l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 • —
dms., l.c.l., same basis lb. .43 • —
n-Butyronitrile, dms., c.l., dlvd lb. .56½- —
dms., l.c.l., dlvd. lb. .57½- —
tanks, dlvd. lb. .54 • —

C

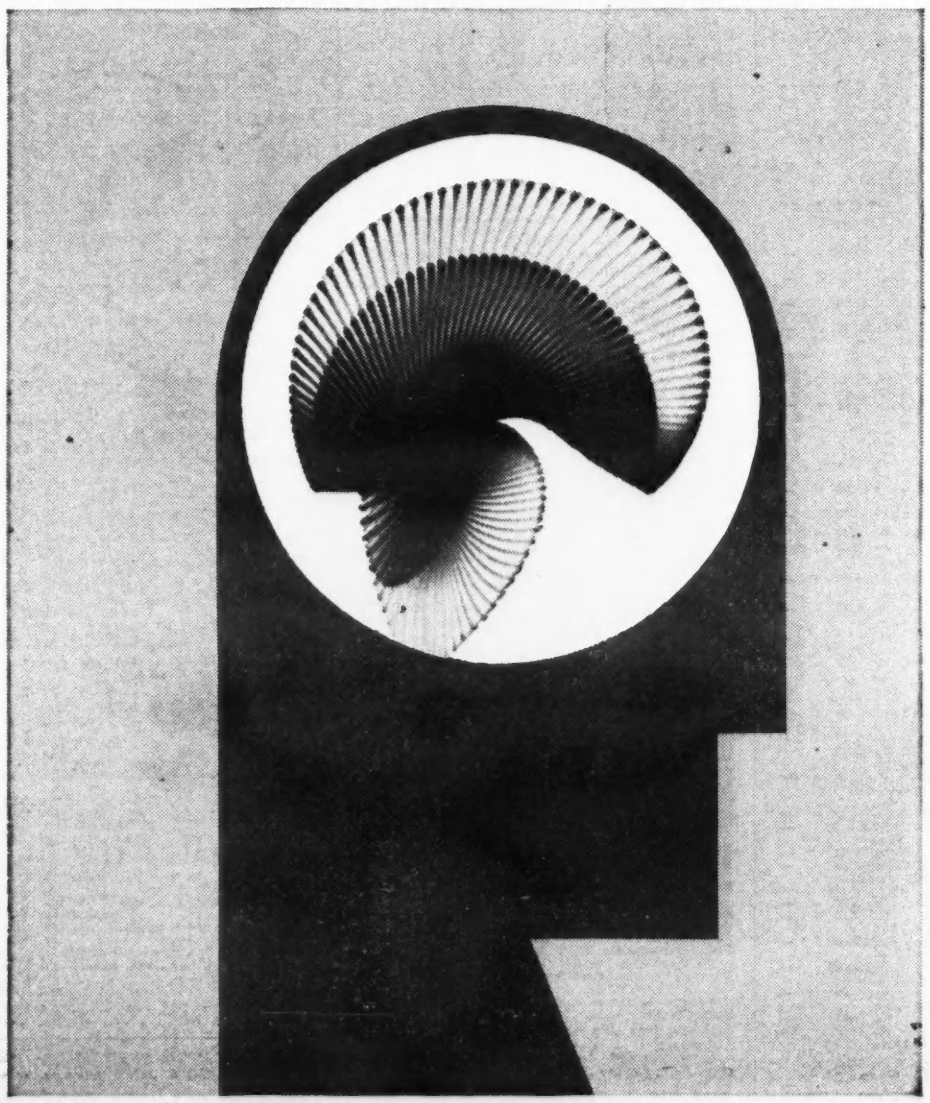
Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt. alld. E. of Rockies lb 5.55 • —
Light shade, bbls., same basis lb 4.65 • —
medium shade, bbls., same basis. lb. 5.30 • —
Medium light shade, bbls., same basis lb 4.90 • —
Orange-red shade, bbls., same basis lb 4.30 • —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb 2.85 • —
Cadmium chloride, 400-lb. dms., f.o.b. shipping point lb. 1.49 • —
Cadmium iodide, 25-lb fib dms lb 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.60 • —
Cadmium nitrate, purif. cryst., 400-lb. dms., less than 5,000 lbs., f.o.b. shipping point. lb. .89 • —
400-lb. dms., 5,000 lbs. or more, same basis lb. .87 • —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.65 • —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.95 • —
Red, light shade, bbls., same basis, lb. 1.72 • —
Red, medium shade, bbls., same basis lb. 1.87 • —
Red, medium light shade, bbls., same basis lb. 1.80 • —
Red, maroon shade, bbls., same basis lb. 2.03 • —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies lb. 2.76 • —
Orange, bbls., same basis lb. 1.58 • —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.72 • —
Red, dark shade, bbls., same basis, lb. 2.56 • —
Red, light shade, bbls., same basis, lb. 1.88 • —
Red, medium shade, bbls., same basis lb. 2.00 • —
Red, medium-light shade, bbls., same basis lb. 2.23 • —
Cadmium-selenide, lithopone, yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.19 • —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 • —
USP, nat., cryst., anhyd., dms., 100-lb lots or more lb. 2.10 • —
Caffeine, USP, nat., cryst., hydrous, dms., 100-lb. lots or more. lb. 1.96 • —
Caffeine, USP, syn., anhyd., dms., 100-lb. lots or more lb. 2.10 • —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 • —
Cajuput oil, native, cns. lb 1.75 2.00
Redist., USP cns lb 1.90 2.10
Calamine, USP, dms. lb. .34 • —
Calamus oil, bots. lb.12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 • —
1-10 kilo lots gram. .55 • —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib, dms., 100 lbs. or more frt. adjusted lb. 3.10 • —
Calcium bromide, NF, jars, 100 lbs. or more lb. 1.10 • —
Calcium carbide standard generator size, 600-lb. dms., c.l., dlvd ton.149.00 • —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 • —
Calcium carbonate, chalk, whiting, 325 mesh, bgs., c.l., works. ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 • —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
precip., dense, bgs., c.l., works. ton.30.00 -38.50
bgs., l.c.l., works ton.45.00 -53.50
medium, bgs., c.l., works ton.38.00 —
bgs., l.c.l., works ton.48.00 -53.00
Calcium carbonate, surface treated, bgs., c.l., works ton.42.00 -44.00
bgs., l.c.l., works ton.57.00 -59.00
ultrafine, bgs., c.l., works. ton.117.50 -167.50
bgs., l.c.l., works ton.137.50 -187.50
Calcium chloride, conc., flake or pellet 94-97%, paper bgs., c.l., works, frt. equald ton.39.30 • —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton.32.00 • —
Liquor, 40%, tanks, frt. equald. ton.12.50 • —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton.37.00 • —
Purif., gran., dms lb. .27 —
Calcium chloride, solid, 73-75%, dms., c.l., frt. equald ton.29.50 • —
dms., l.c.l. works frt. equald. ton.36.00 -73.00
USP, gran., dms. lb. .32 • —
Calcium chromate, bgs., dlvd lb. .37 • —
Calcium cyanide dms., c.l., dlvd. E. of Rockies lb. .20 • —
dms., l.c.l. same basis lb. .24 • .55
Calcium cyclamate, 100-lb dms lb. 1.95 • —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. 73½- —
USP, powd. 100-lb dm., ton lb. .66½- —
Calcium hydride, lump, dms., works, lb. 2.20 - 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies cs.23.85 -25.60
100-lb dms. same basis dm.33.30 -36.55
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 • —
Calcium iodide, 25-lb. jars, works. lb. 4.27 • —
Calcium lactate, NF, dms., f.o.b. works lb. .43 • .48
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 • —
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .30 • —
Calcium pantothenate, USP, jars, 1 kilo or more kilo.35.00 • —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms. lb. 1.34 - 1.38
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs.16.00 • —
Dibasic, feed grade, 18½ % P, bgs., c.l., t.l., frt. equald ton.86.00 • —
bgs., c.l., t.l., f.o.b. Texas City works ton.80.50 • —
bgs., l.c.l., frt. equald ton.96.00 • —
Calcium phosphate, dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton.97.65 • —
bgs., l.c.l., frt. equald ton.107.65 • —

Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.

Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 • —
bgs., smaller lots, same basis. 100 lbs. 7.95 • —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 • —
bgs., l.c.l., frt. equald 100 lbs.10.00 • —
Calcium propionate, any quantity, dms., dlvd. E. of Rockies. lb. .34½- —

Prices W. of Rockies 3c. per lb. more.

Calcium phytate, bgs., 50 lbs. or more, f.o.b. warehouse N. Y lb. .39 • —
Calcium resinate, precip., dms., frt. alld., works lb. .45 • —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 • —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 • —
ctns., l.c.l. lb. .40 • .44
Calomel, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 • —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 • —
Camphene, 46° m.p., dms. incl., c.l., works lb. .15 • —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Nat., USP, powd., cs., 100-lb. lots. lb. .60 - .65
tablets, 1-oz. cs. lb. .85 - .90
Nat., USP, gran., bbls., 2,000-lb. lots lb. .59 • —
Camphor, syn., tech., 1 bbl. or more. lb. .48 • —
USP, gran., powd., bbls., 1,000-lb. lots lb. .58 • —
bbls., smaller lots lb. .59 • —
tablets, ctns., 1,000-lb. lots. lb. .80 • —
ctns., 500-lb. lots lb. .81 • —
ctns., smaller lots lb. .82 • —
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 • .50
Cananga oil, native, cns. lb. 5.00 - 6.50
Rectified, cns. lb. 7.25 -10.00
Candelilla wax, crude, bgs. lb. .55 - .58
Refd., pure, bgs. lb. .60 - .62
Powdered Candelilla wax 20 to 100 mesh, 3c. higher.



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Mallinckrodt alone makes calcium gluconate electrolytically, with the single purpose of giving you a fine product adaptable for easy tableting or capsuling and unsurpassed for yielding clear, stable parenteral solutions.

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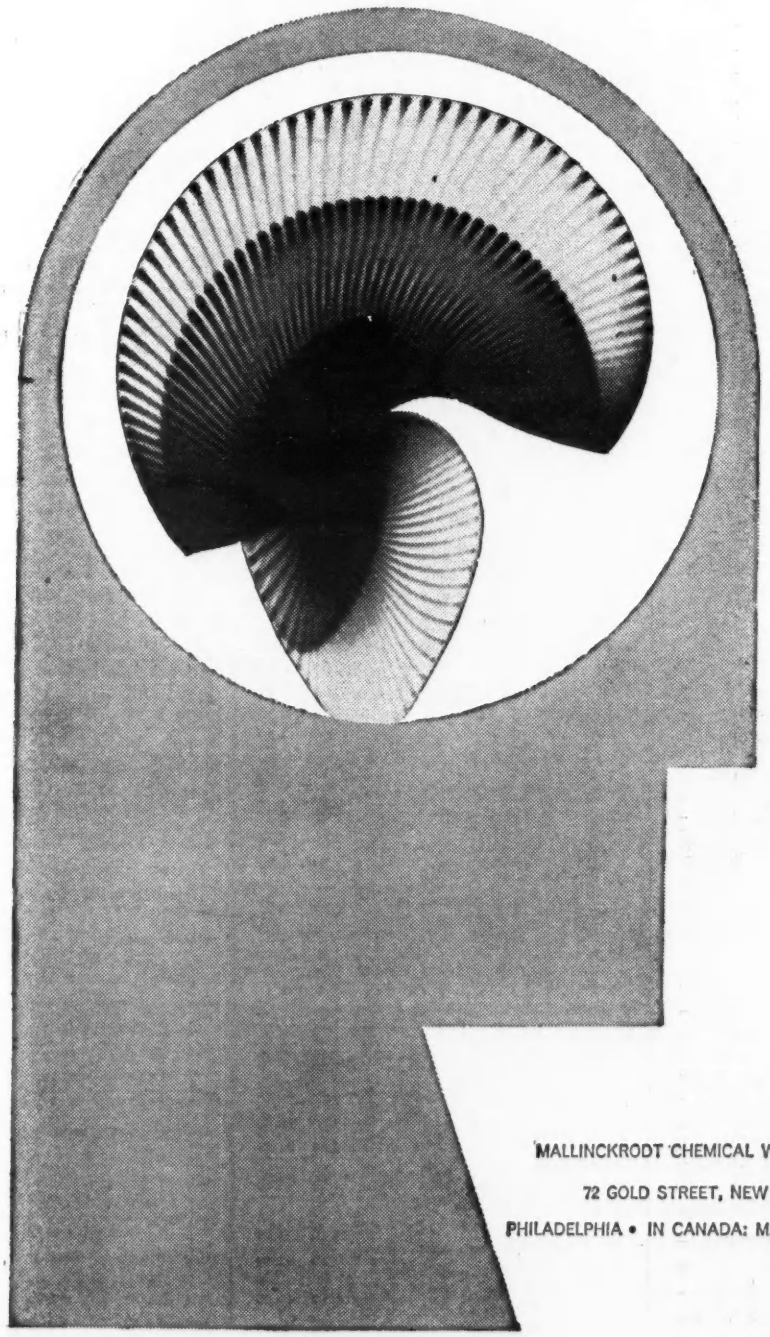

Imaginative...
We use tradition
as a spur to
greater
achievement,
developing
in our
products
of today
the potential
of tomorrow.
Today we meet
our standards-
tomorrow we
exceed them.
After 92 years,
it's a habit.

Mallinckrodt®

MALLINCKRODT CHEMICAL WORKS, SECOND & MALLINCKRODT STREETS, ST. LOUIS 7, MO.
72 GOLD STREET, NEW YORK 8, N. Y. • CHICAGO • CINCINNATI • LOS ANGELES
PHILADELPHIA • IN CANADA: MALLINCKRODT CHEMICAL WORKS, LIMITED • MONTREAL • TORONTO

Cantharides, Chinese, cs. ..... lb. 1.00 - —
powd., bgs. ..... lb. 1.15 - —
Russian, bgs. ..... lb 2.00 - 2.15
powd., bgs. ..... lb. 2.15 - 2.30
Capric acid, dms. ..... lb. .29¼- .31¾
tanks ..... lb. 26¾- —
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., t.l., same basis lb. .57 - —
tanks, same basis ..... lb. .49 - —
Capryl alcohol 85% dms., c.l., t.l., works lb. .19 - —
dms., t.t.l., same basis ..... lb. .19½- —
tanks, frt. equald. ..... lb. .16½- —
Sec., 92-99%. dms., c.l., f.o.b. works lb. .22 - —
dms., l.c.l., f.o.b. works ... lb. .23 - —
tanks, f.o.b works ..... lb. .19½- —
Caprylic acid, dms. ..... lb. .29¼- .31¾
tanks ..... lb. 26¾- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms ..... lb. 3.75 - —
Caraway seed Danish, bgs. ..... lb. .16 - —
Dutch, bgs. ..... lb. .18 - —
Polish, bgs. ..... lb. .17¼- —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works ..... lb. .08½- —
bgs., l.c.l., works ..... lb. .16¼- —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .08¾- —
ctns., l.c.l., whse. ..... lb. .13½- —
Carbon black, high abrasion, bulk, c.l., works lb. .07¼- —
bgs., c.l., works ..... lb. .07¾- —
bgs. l.c.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works. lb. .06¼- —
ctns. l.c.l., whse. ..... lb. .13 - —
semi-reinforcing, bgs., c.l., works lb. .05¾- —
bgs., ctns., l.c.l., whse ..... lb. .12½- —
pigment, high color heads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton. 60.00 - 115.00
bulk, 3,000,000 lbs. or more, dlvd Metropolitan areas, E ton. 55.00 - —
Solid, bulk, wholesale, works ton. 85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. ..... lb. .0520- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾- —
dms., l.c.l., frt. alld. ... lb. .15¼- —
Tech., consumers dms., c.l., t.l., frt. alld lb. .11¾- —
dms. l.c.l. t.t.l., frt. alld lb. .14¼- —
tanks, frt alld ..... lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF dms., 100-lb lots, works lb 4.00 - 4.25
dms., smaller lots, works .. lb 4.10 - 4.75
Cardamom oil, NF, bots ..... lb. 43.00 - 45.00
Cardamom seed, bleached "A" .. lb. 3.45 - —
Bleached "B" ..... lb. 3.15 - —
Decorticated Alleppey, cs .... lb. 2.15 - —
Guatemala, cs. ..... lb. 2.85 - —
Green, Alleppey, bgs. ..... lb. 2.15 - —
Ceylon, bgs. ..... lb. 2.20 - —
Carmine No. 40, NF, bulk, 100-lb lots or more dlvd. .... lb. 16.80 - —
bulk, smaller lots, dlvd. .... lb. 16.90 - 17.30
Carnauba wax, chalky, bgs., ton lots .. lb. Nom.
North Country, No. 2, crude, bgs., ton lots lb. .80 - .82
refd., pure, ton lots ..... lb. .87 - .88
North Country, No. 3, Ceara, crude, ton lots lb. .67 - .68
North Country, No. 3, Parnahyba, crude, ton lots lb. .69 - .70
No. 3, refd., pure, bgs., ton lots. lb. .76 - .78
No. 1, Ceara, yellow, bgs., ton lots. lb. .98 - .99
Parnahyba, yellow, bgs., ton lots. lb. 1.00 - 1.01
Powdered carnauba wax, 20 to 100 mesh 8c. per lb higher.
Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene, in vegetable oil, semi solid suspension 400,000 A units per gram cns kilo. 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. kilo. 240.00 - —
Carvol, bots. ..... lb. 5.00 5.40
Cascara sagrada bark, bulk ..... lb. .32 - —
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock Eastern seaports lb. .17¾- .18¼
Australian, bgs., c.l., same basis lb. .22¼- .22¾
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J. lb. .24 - —
dms. ton lots, same basis ... lb. .25 - —
t.w., same basis ..... lb. .22½- —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia oil, redist., USP, cns. ..... lb. 7.50 - 9.00
Cassia, Padang, "A," bls ..... lb. .31 - —
"B," bls. ..... lb. .30 - —
"C," bls. ..... lb. .29 - —
Korintje "A," bls. ..... lb. .34 - —
"B," bls. ..... lb. .30 - —
"C," bls. ..... lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. ..... lb. .2650- —
Castor oil, dom., dehydrated, bodied, dms., c.l lb. .2700- —
dms., l.c.l. ..... lb. .2850- —
tanks ..... lb. .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., l.c.l. ..... lb. .2660- —
tanks ..... lb. .2360- —
hydrogenated, bgs., c.l. ..... lb. .2450- —
bgs., ton lots ..... lb. .2850- —
bgs., l.c.l., dlvd. ..... lb. .3050- —
Castor oil, No. 1, dms., c.l. .... lb. .2150- —
dms., l.c.l. ..... lb. .2300- —
tanks ..... lb. .2000- —
No. 3, tech., dms., c.l. ..... lb. .2125- —
dms., c.l., ... lb. .2225- —
tanks ..... lb. .1925- —
Refd. dead., dms., c.l. ..... lb. .2650- —
dms., l.c.l. ..... lb. .2750- —
tanks ..... lb. .2450- —
USP, dms., c.l. ..... lb. .2350- —
dms., l.c.l ..... lb. .2450- —
tanks ..... lb. .2150- —
Imported, No. 1, Braz., tanks lb. .18¼- —
Sulfonated, 50%, dms., works lb. .15 - .15½
75%, dms., works ..... lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .41¼- .43¼
Split, dms. ..... lb. .33¾- .34¾
Castor pomace, bgs., c.l., works ton. 35.00 - —
Castoreum nat., cns. ..... lb. 5.25 - —
Syn., cns. ..... lb. 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½- —
Resub., dms., works ..... lb. 4.29½ —
Catnip leaves, Southern, bls .... lb. Nominal.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII cns., dms. lb. 3.25 3.50
Cedarwood oil, cns., dms ..... lb. .80 - —
Celery seed, French, bgs. ..... lb. .37 - —
Indian, bgs. ..... lb. .19 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb. .38 - .51
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .545 .555
27% butyryl content, bgs. dlvd. E lb. .595 .605
38% butyryl content, bgs. dlvd. E lb. .545 .555
38% butyryl content, half-second, bgs., dlvd E lb. .545 .555
50% butyryl content, bgs. dlvd. E lb. .585 .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium hydrate 74% CeO, fib dms., 100-lb. lots or more lb. 1.40 - —
77% CeO, fib dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd. lb. 1.85 - 1.90
bgs., smaller lots, dlvd. ..... lb. 2.15 - —
Cetyl alcohol NF fib cns., c.l., t.l., dlvd E lb. .41½- —
fib. cns., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .39 — —
Extra, cns., c.l., t.l., dlvd E lb. .48¼- —
fib cns., l.c.l., same basis lb. .50½- —
tanks, same basis ..... lb. .46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, lb. .95 - 1.05
Roman, cs. ..... lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots lb. 350.00 - —
Charcoal, activated NF, fib dms., c.l., works lb. .34 - - -
fib. dms., 5-ton lots, works lb. .35 - .35½
fib. dms., smaller lots, works lb, .36 - .59
Charcoal, black (see Charcoal, activated)
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton. 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton. 80.00 - —
5-lb. paper bgs., c.l., same basis ton. 106.00 - —
20-lb. paper bgs., c.l., f.o.b. plant, ton. 90.00 - —
40-lb. paper bgs c.l. same basis ton. 86.00 - —
Chenopodium oil, NF, cns ..... lb. 4.75 - 5.00
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.00 - —
jars, 500-lb lots ..... lb. 1.03 - —
jars, 100-lb. lots or less ..... lb. 1.05 - —
Chlordan, agricultural, dms., c.l., frt alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt alld lb. .66 - —
Chlordan, clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt alld lb. .70 - —
Chlorinated paraffin, 40%., dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., 10 dms or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l. works ..... lb. .61 - —
125 cps. ctns., c.l., works ..... lb. .70 - —
300 cps., ctns., c.l., works .... lb. .80 - —
Chlorine, liq., cyls., c.l., works, frt equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 - 5.85
tanks, multiple units, 1 car, same basis¾ 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, purif., dms., c.l lb. .23½- .25½
dms. l.c.l. ..... lb. .24½- —
tech., flake, 96-97%, dms., c.l., dms., l.c.l., frt. equald lb. .20 - —
frt. equald lb. .19 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., t.c.l., same basis ..... lb. .77 - —
tanks, same basis ..... lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., t.c.l., same basis ..... lb. .54 - —
tanks, same basis ..... lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., t.c.l., same basis ..... lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
dms., t.t.l., same basis ... lb. 1.20 - —
p-Chlorobenzaldehyde, dms., t.c.l., works lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., t.c.l., same basis ..... lb. .19 - —
tanks, same basis ..... lb. .17 - —
Chloroform, USP, dms., c.l., dlvd. lb. .27 - —
dms., t.c.l., dlvd. ..... lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd. E. 100% basis lb. .86½- —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms. frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 - —
o-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld. lb. .20½- —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms. t.c.l. same basis ..... lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms. t.c.l., same basis ..... lb. .38 - —
Chloropicrin, coml., cyls., 180 lbs., frt alld lb 1.07 - —
cyls., 100 lbs., same basis lb 1.08 - —
cyls., 50 lbs., same basis lb. 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., t.c.l. frt equald .... lb. .0515- —
tanks, frt. equald ..... lb. .0415- —
Chlorosulfonic acid, in stainless steel dms ½c. per lb higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., t.c.l., t.t.l., same basis lb. .38 - —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 - —
Choline chloride, 100-lb. dms., frt. equald lb. 1.25 - —
Choline dihydrogen citrate, 100-lb. dms., frt. equald lb. 1.25 - —
Chrome green CP dark, light, medium blue content, 1-15%, bbls. dlvd E of Rockies. lb. .43 - —
blue content, 16-30%, bbls., same basis lb. .44 - —
medium blue content, 41-45% bbls., same basis lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
Chrome green, reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c. higher W of Rockies.
Chrome orange CP bbls., dlvd. E of Rockies lb. .35 - —
Chrome orange prices 1c. higher W of Rockies.
Chrome yellow CP bbls., dlvd E of Rockies lb. .35 - —
Chrome yellow price 1c. higher W of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. lb. .10 - —
Chromium fluoride, bbls., works lb. .51 - .53
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld. lb. 1.20 - —
Pure, bgs., c.l., frt. alld ..... lb. .44½- —
bgs., l.c.l., same basis ..... lb. .45¼- —
Chromium trioxide, NF, bots .... lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb. .25 - —
NF, yellow, broken, bgs ..... lb. .35 - .40
Cinnamic acid, refd., bots ..... lb. 2.50 - 3.50
Cinnamic alcohol, bots ..... lb. 1.50 - 1.60
Cinnamic aldehyde, dms. ..... lb. .80 - 1.00
Cinnamon, Ceylon, No. 2, bgs. .. lb. .53 - —
Ceylon, No. "0000," bgs. ..... lb. 3.75 - —
Cinnamon bark oil, bots ..... lb. 48.00 - 56.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP (Cassia), cns., dms ..... lb. 8.50 - 13.50
Citral, CP, bots. ..... lb. 3.60 - 4.00
Extra, bots. ..... lb. 3.60 - 5.00
Syn., dms. ..... lb. 7.25 - 7.40
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms. ..... lb. 1.00 - —
Java-type, dms. ..... lb. 1.00 - —
Citronellal, bots., dms. ..... lb. 1.40 - 1.60
Citronellol, bots., dms. ..... lb. 1.90 - 2.50
Citronellol, synthetic, dms. ..... lb. 1.70 - —
Civet, artif., bots ..... lb. 13.75 - 15.00
Nat. bots. ..... oz. 8.50 - 15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton. 17.50 - 21.50
crushed shed moisture, bulk, c.l., Tenn. ton. 8.00 - 11.25
imp., airfloated, bgs., c.l., Atl. port net-ton. 43.00 - 47.00
lump, bulk, Atl. port net-ton. 31.50 - 37.50
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 11.00 - 17.00
Georgia, bgs., l.c.l., works. ton. 13.50 - 22.50
imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me. long-ton. 23.00 - 35.00
white, powd., bgs., c.l., ex dock. net-ton. 50.00 - —
bgs., l.c.l., ex whse net-ton. 60.00 - 70.00
Cleaners naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York gal. 18 - —
Group 3 ..... gal. .12@75 -
Houston, Texas ..... gal. .145 - —
140°F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 ..... gal. .154 - —
Houston Texas ..... gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1,6, tech., solid, dms., frt. alld lb. .77 - —
1,7, tech., dms., frt. alld ..... lb. 2.20 - —
Cloves, Madagascar, bgs. ..... lb. .37 - —
Zanzibar, bgs. ..... lb. .38 - —
Clove bud oil, USP, dms. ..... lb 2.70 3.00
Clove leaf oil, crude, dms. ..... lb. 1.25 - —
CMC, crude, 96.4% low or medium vis., bgs., 23,000 lbs., dvld. E., 100% basis lb. .40 - —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 - .50
65%, low or medium vis., bgs., c.l., dlvd. E., 100% basic lb. .40 - —
t.c.l., dlvd. E., 100% basis lb. .42 - 1.00
purif., high vis. (see Cellulose gum).
CMC, standard low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - 1.00
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for soln., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., t.c.l., ex whse gal. .39 - —
tanks, works gal. 20½- —
Coaltar pitch, aluminum, bulk, works. ton 44.00 - —
Carbon and indust., bulk, works ton 44.00 - —
Core, bulk works ..... ton 40.50 - —
Fiber, bulk works ..... ton 48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type I tanks, works ton. 41.00 - —
Cobalt acetate 23.7% Co., dms., dlvd lb 1.04 - —
Cobalt blue, genuine, 250 lb bbls. dlvd E of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies
Cobalt blue imitation (see Ultramarine blue)
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms lb. .57½- —
Cobalt metal, 99% dms., f.o.b carrier lb 1.50 - —
Cobalt naphthenate liq. 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate 20.1% Co. bbls. dlvd. lb. .75 - —
Cobalt oxide, black, ceramic grade, 72½ 73½% Co., kgs., dlvd E of Mississippi R. lb 1.15 - —
70-71% Co kgs. same basis lb 1.12 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb 1.35 - —
Cobalt resinate, fused 3% Co., dms lb. .38½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms. dlvd. lb. .44 - —
Cocaine, USP cns., 100-oz. lots, f.o.b works oz. 17.50 - —
Cocaine hydrochloride, cns. 100-oz. lots f.o.b. works oz. 13.75 - —
Cocillana bark bls ..... lb 18 - .20
Cocoa butter, bgs. ..... lb. .64½- .65¼
Coconut oil, crude, tanks, New York lb. .14¼- .14⅜
tanks, Pac. coast ..... lb. .12⅞- —
Refd. deodorized, dms ..... lb. .19½- .20¼
Coconut oil acids, dist., dms .... lb. .23½- .26
tanks ..... lb. .21 - —
double dist. (stripped), dms .... lb .24½- .27
tanks ..... lb. .22 - —
Cod oil, dms. spot ..... lb. .08⅛- .08¼
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms. ..... gal 1.40 - 1.70
Cohosh root, black, bls ..... lb. .20 - .25
Blue, bls. ..... lb .20 - .25
Colchicine, USP, bots ..... oz. 29.00 - —
Colchicum root, bls ..... lb. .35 - .45
Colchicum seed, bgs ..... lb .75 - .80
Collodion, USP dms ..... lb. .32½- —
USP flexible, dms ..... lb. .34 - —
Colocynth pulp, bls. ..... lb. .75 - —
Colombo root, bls ..... lb. .16 - .18
Condurango bark bls ..... lb. .18 - .20
Congo copal gum, No. 1, bgs .... lb. .26 - .27
No. 2, bgs. ..... lb. .23 - .25
No. 3, bgs ..... lb. .21 - .24
Copaiba balsam, cns., dms ..... lb. .65 - 1.10
Copaiba oil, cns ..... lb. 1.35 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l. works ..... lb. .54 - —
Copper carbonate, 55%, dark dense, works lb. 34.85 - —
bgs., l.c.l., works ..... lb. 36.35 - —
Copper chloride, cupric, anhyd., dms., works lb. .44 - .44½
cryst., dihydrate, dms., works. lb. .30 - .30½
cryst., dried., dms., works lb. .38¼- .38¾
Copper chloride, cuprous, dms., works lb. .39¼- .42¼
Copper cyanide, tech., dms. 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb lots or more lb. .619 - —
dms., smaller lots ..... lb. .639 - .65
Copper gluconate dms ..... lb. 3.20 - —
Copper hydrate dry, dms. c.l., frt. E. of Miss lb. .52½- —
dms., l.c.l., same basis ..... lb. .53 - —
Copper metal, electrolytic dlvd. Valley, basis lb. .30 - —
Copper naphthenate, liq., 8% Cu, dms. frt alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black bbls., 100-5,000-lb. lots, works lb. .46¼- —
Copper oxide, red, 97% USN Type I, bbls., 100-5,000-lb lots. lb. .47½- —
80% USN Type II, bbls., 100-5,000-lb. lots or more, works lb. .46½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb. .47 - —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works. 100 lbs. 12.25 - —
bgs., l.c.l., works ..... 100 lbs. 12.75 - 15.25
Monohydrated, 35%, dms., c.l. works 100 lbs. 23.00 - —
dms., l.c.l., works .... 100 lbs. 23.75 - —
Tribasic, distributors, bgs., c.l. works 100 lbs. 29.60 - —
bgs., l.c.l., works 100 lbs. 31.10 - —
Copper undecylenate, dms ... lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f .... ton. 177.50 - —
Pac. ports, c.i.f ..... ton. 172.50 - —
Coriander oil, USP, bots. ..... lb. 7.25 - 8.75

Coriander seed, Moroccan, bgs. lb. .20 - —
Rumanian, bgs. lb. .18 - —
Yugoslavian, bgs. lb. .08½- —
Corn oil, crude, tanks, works lb. .14 - —
Foots (soapstock) acid, 95%, tanks, New York lb. .05½- —
Refd., salad, dms. lb. .1943- .1975
tanks lb. .1743- —
Corn oil acids, dist., dms. lb. .14¾- .17¼
tanks lb. .12¼- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l. 100 lbs. 7.45 - —
Corn syrup, 43° Be., tanks, dlvd. N.Y. 100 lbs. 6.30 - —
non-ret. dms., c.l., same basis. 100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram. 1.05 - 1.75
Costus oil, bots. oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton 55.00 - —
Cottonseed oil, crude, tanks, South, East lb. .10½- .10½
tanks, Valley lb. .10 - —
tanks, Texas, Lubbock lb. .09¾- —
tanks, Texas, Waco lb. .09⅞- —
Foots (soapstock), acid, 95%, tanks, Texas, Waco lb. .04¼- —
Refd., salad, dms. lb. .15¾- .16
tanks lb. .13¾- —
Cottonseed oil acids, dist., dms lb. .14¾- .17¼
tanks lb. .12¼- —
Coumarin, NF, cryst., dms lb. 3.30 3.40
Cramp bark, NF, bls lb. .90 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., chys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln 80%, tanks, works, gal. .226 - —
Refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. 62 - —
tanks, same basis gal. 38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, chys., dms., same basis lb. 1.42 - 1.47
Pinewood, dms., incl., c.l., works, lb. .0611- —
dms, incl., l.c.l. works lb. .0684- —
dms, incl., l.c.l. ex whse, New York lb. .0795- —
tanks, works lb. .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis, lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98% dms., c.l., works, lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2.97% 2°C., dms. c.l., frt. equald. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p and over, ret., dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
o-Cresol, 30.5°C. m.p and over, ret. Cresol, 29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd lb. .53 - —
tanks, dlvd lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. 72 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more, gal. 1.03½- —
less than 50 dms., same basis gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l, works lb. .25 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
bgs., l.c.l. works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 - —
bgs., l.t.l., works lb. .22 - —
Cubeb berries, NF, bgs lb. 1.00 - —
Powd., cs. lb. 1.15 - —
Cubeb oil, cns lb. 9.00 -12.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs lb. .20 - —
Moroccan, bgs. lb. .36 - —
Turkish, bgs. lb. .19 - —
Cumin seed oil, bots., cns lb. 15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract, ton 57.00 - —
Fertilizer, pulv., 21% N, bgs., works unit-ton 2.85 - —
Cyanamide, fertilizer, indust. grade, bgs, c.l., works ton 75.00 - —
bgs., l.c.l., works ton 96.00 - —
Indust. grade, 6-16 mesh, dms., c.l., works ton 120.00 - —
dms., l.c.l., works ton 140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd, E of Rockies gal 1.02 - —
dms, l.c.l., same basis gal. 1.10 - —
dms., c.l., dlvd, W of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
98%, tech., 40-dm. lots or more, f.o.b works gal. .56 - —
5-39 dms. same basis gal. .60 - —
tanks, same basis gal. .36 - —

Cyclohexanol, tech., dms., c.l., works, frt. alld. E. lb. .28½- —
dms., l.c.l., works, same basis. lb. .29½- —
tanks, works, same basis lb. .26 - —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l., works lb. .34½- —
tanks, works lb. .31 - —
Cyclohexylamine, tech., dms., c.l., works lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cypress oil, bots. lb. 5.30 - —

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2,4-D, tech., bgs., dms., c.l., works, frt. equald lb. .40 - —
bgs., dms., l.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms., c.l., works. lb. .43 - —
dms., l.c.l., same basis lb. .48 - .52
tanks, same basis lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .48 - .52
tanks, works lb. .42 - —
Dammar gum, Batavia, A E, cs lb. No stocks.
East India, Batu, bold, bgs lb. .15½- .18
nubs and chips, bgs lb. .10 - .11
black, bold, bgs lb. .15½- .18
nubs and chips, bgs. lb. .12¼- .13½
unscraped, bgs. lb. .13 - .14½
pale, chips, bgs. lb. .15 - .17
pale, nubs, bgs. lb. .20¾- .24
Siam, cs. lb. .31½- .34
Singapore, No. 1, bgs lb. .35 - .40
No. 2, bgs. lb. .29 - .32
dust, bgs. lb. .18 - .20
No. 3, bgs. lb. No stocks.

Dandelion root, bls. lb. .35 - .40
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib. dms., l.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 - —
bgs., smaller lots, same basis. lb. .25 - —
fib. dms., c.l., same basis lb. .24 - —
fib. dms., smaller lots, same basis lb. .26 - —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
l-Decanol, tech., dms., c.l., dlvd. E. lb. .43½- —
dms., l.c.l., dlvd. E. lb. .45½- —
tanks, dlvd. E. lb. .41 - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd. lb. .25 - —
tanks, dlvd. lb. .21 - —
Perfume grade, bots. lb. 1.00 - 2.00
Decyl alcohol, normal (see l-Decanol).
Deertongue leaves, bls. lb. .55 - .60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss. ton 57.07 - —
18% P, paper bgs., c.l., works. ton 66.25 -81.00
19% P, paper bgs., c.l., t.l., works, Houston, Tex. ton 74.35 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.

Degras, common (15-17% free fatty acid), 400-lb. dms lb. .13 - .14
Neutral (over 2% free fatty acid), 400-lb. dms. lb. 13 - —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies. gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80⅛
tanks, dlvd., same basis gal. .53½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .72 - —
dms., l.c.l., same basis gal. .77 - .83
tanks, same basis gal. .56 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81⅛
tanks, same basis gal. .54½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .69 - —
dms., l.c.l., same basis gal. .74 - .80
tanks, same basis gal. .53 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
Denatured alcohol, ethyl, SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81⅛
tanks, same basis gal. .54½- —

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Denatured Alcohol—Ethyl Acetate

Denatured alcohol, ethyl [illegible] dms., c.l., dlvd. E. of [illegible]: 71 - —
dms., t.c.l., same basis gal 76 - .82
tanks, same basis gal 55 —
Denatured alcohol, SD29 dms., c.l., dlvd. E. of Rockies gal. .69½ —
dms., t.c.l., same basis gal. 74½ .80½
tanks, same basis gal. 53½ —
SD30, dms., c.l. dlvd. E of Rockies gal. 68 —
dms., t.c.l., same basis gal. 73 - 79
tanks, same basis gal. 52 - —
Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd E of Rockies gal. 71 —
dms., t.c.l., same basis gal. 76 .82
tanks, same basis gal. 55 —
Denatured alcohol, ethyl, SD 40, dms., dlvd. E. of Rockies gal. .70½ —
dms., t.c.l., same basis gal. 75½ .81½
tanks, same basis gal 54½ —

For anhyd. alcohol on above formulas prices are 7c per gal higher

West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c differential on tankcars is maintained

d-Desoxyephedrine hydrochloride, dms lb. 15.00 - 17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.50 —
Dextrin, corn gum, paper bgs., c.l., 100 lbs. 9.19 - —
100 lbs. 9.34 - —
canary, dark, paper bgs., c.l. 100 lbs. 9.03 - —
paper bgs., l.c.l. 100 lbs. 9.18 - —
Indust. grade 6-16 mesh canary light, paper bgs., c.l. 100 lbs. 8.93 - —
paper bgs., l.c.l. 100 lbs. 9.08 - —
white paper bgs., c.l. 100 lbs. 8.77 - —
paper bgs., l.c.l. 100 lbs. 8.92 - —

Corn dextrin in cotton bgs 15c per 100 lbs higher

Dextrose, anhyd., coml., bgs., c.l. 100 lbs 8.65 — —
bgs., l.c.l. 100 lbs 8.80 - —
Anhyd., special, aluminum foil lined fib. dms. 200-lb dms 100 lbs. 14.70 - —
100-lb. dms. 100 lbs 15.20 - —
Hydrated, coml., bgs., c.l., ex whse 100 lbs 7.45 — —
bgs., c.l. ex whse 100 lbs 7.60 — —
USP, dms lb 19¾ — —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb .15½ — —
dms., t.c.l. dlvd. lb .17 — —
tanks, dlvd lb .13 — —
Tech., dms., c.l. dlvd. lb .15 — —
dms., t.c.l. dlvd. lb .16½ — —
tanks, dlvd lb 12½ — —
Diacetyl, flavor grade, bots. lb. 3.30 - 4.30
Di-sec-amyl phenol, dms., c.l., works lb .32 — —
dms., t.c.l., works lb .33 — —
tanks, works lb 29½ — —
Di-tert-amyl phenol, dms., c.l., works lb .32 — —
dms., t.c.l., works lb .33 — —
tanks, works lb 29½ — —
Diallylamine, dms., c.l., dlvd. lb 98½ — —
dms., t.c.l., dlvd. lb 1.00 - —
tanks, dlvd lb .96 - —
o-Dianisidine, dry, tech., fib dms lb 2.00 - —
Dibenzyl sebacate, dms., c.l., works lb .93 - —
dms., t.c.l., same basis lb .94 - —
tanks, same basis lb .91 - —
Dibromobenzene, bgs., 500-lb lots. lb .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd lb .65 - —
t.l., dms., same basis lb .68 - —
Food grade, c.l., t.l., dms., dlvd lb .65 - —
dms., t.l.t., same basis lb .68 1.10
Tech., dms., c.l., t.l. dlvd. lb .57 - —
dms., t.c.l., same basis lb .60 - —
tanks, same basis lb .54 - —
Dibutyl fumarate, dms., c.l., t.t., dlvd E lb .31½ - —
dms., t.c.l., t.t.l., dlvd E lb .33 - —
tanks, dlvd E lb .29 - —
Dibutyl maleate, dms., c.l., t.t., dlvd E lb. .31½ - —
dms., t.c.l., t.t.l., dlvd E lb .33 - —
tanks, dlvd E lb .29 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb .31 - —
dms., t.c.l., same basis lb .32½ - —
tankcars, tank-truck, 900 gals. same basis lb. .28½ - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½ - —
Dibutyl sebacate, dms., c.l., works. lb .67½ — —
dms., t.c.l., works lb .68½ — —
tanks, works lb. .65½ - —
Dibutyl tartrate, dms., works, frt. alld lb. .65½ — —
Dibutylamine, dms., c.l., dlvd lb .55½ — —
dms., t.c.l., same basis lb .57 — —
tanks, same basis lb .53 — —
Dicapryl phthalate, dms., c.l., dlvd. lb .28½ - —
dms., t.c.l., dlvd. lb .30 - —
tanks, dlvd. lb .26 - —
Dicapryl sebacate, dms., c.l., works. lb .63 — —
dms., t.c.l., works lb .63½ - .64
tanks, works lb .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt alld lb. .73 - —
o-Dichlorobenzene, dms., c.l., frt. alld E lb. .12¾ — —
dms., t.c.l., same basis lb .13¾ - —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., t.o.b. works, frt alld E lb. .12 — —
dms. 2,000 lbs or more same basis lb. .14½ — —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½ - —
dms., t.c.l., or t.l.t., works lb. .34 - —
tanks, works lb .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd E lb. .15½ - —
dms., t.c.l., t.l.t., same basis lb .17 - —
tanks same basis lb. .13 - —
Dichloroisocyanuric acid, dms., c.l., t.l., frt equald lb .65 - —
dms., t.c.l., same basis lb .75 - —
Dichloropentanes, dist., dms., c.l., works lb .05 - —
dms., t.c.l., works lb .06 - —
tanks, works lb .03 - —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine, dms., c.l., works. lb .54 - —
dms., t.c.l., works lb .55 - —
tanks, works lb .52 - —
Dicyclohexyl phthalate, gran., fib dms, c.l., works frt alld lb. .47½ - —
fib. dms., l.c.l., same basis lb. .49 - —
Dicyclopentadiene, dms., c.l., t.o.b. works lb .14½ — —
dms., t.c.l., same basis lb. .14¾ — —
tanks, same basis lb. .12 — —

Didecyl phthalate, dms., c.l., works, lb 28½ - —
dms., t.c.l., same basis lb 30 — —
tankcars, tanktrucks, 2,000 gals. lb 26 — —
tanktrucks, 1,000-1,999 gals., same basis lb 26½ - —
Dieldrin, dms., c.l. dlvd. lb 1.85 - —
dms., t.c.l. dlvd. lb 1.90 - —
Diethanolamine, dms., c.l., dlvd E, lb .27 — —
dms., t.c.l., same basis lb .28½ - —
tanks, same basis lb. .24½ - —
Diethanolamine lauryl sulfate, dms., c.l., frt alld lb 27½ — —
dms., t.c.l., frt. alld. lb 28½ — —
tanks, frt alld lb. 26½ — —
Diethyl barbituric acid (see Barbital)
Diethyl carbonate, dms., c.l., t.o.b. works lb 47½ — —
dms., t.c.l., same basis lb 48½ — —
tanks, same basis lb 45 — —
Diethyl ethanolamines, dms., c.l., dlvd lb 69½ — —
dms., t.c.l., dlvd. lb 71 — —
tanks, dlvd lb .67 — —
Diethyl oxalate, dms., c.l., t.o.b. works lb 42½ — —
dms., t.c.l., same basis lb 43½ — —
tanks, same basis lb. 40 — —
Diethyl phthalate, dms., c.l., dlvd. lb .27½ — —
dms., t.c.l., dlvd lb. 29 — —
tanktrucks, 1,000-1,999 gals., same basis lb. 26½ - —
tankcars, tanktrucks, 2,000-lb lots, same basis lb. 26 — —
Diethyl sulfate, dms., c.l., works lb 19½ — —
dms., t.c.l., works lb. 20¼ — —
tanks, works lb. 17½ — —
Diethyl thiourea, dms., c.l., t.l., works lb 58 — —
dms., t.c.l., same basis lb 59 — —
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works, lb 2.30 - —
5-44 dm. lots, works lb 2.35 - —
1-4 dm. lots, works lb 2.40 - —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 — —
Diethylamine, dms., c.l., dlvd E lb. .52 — —
dms., t.c.l., same basis lb. .53½ — —
tanks, same basis lb .49½ — —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., t.c.l., same basis lb .58 - —
tanks, same basis lb .55 — —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt. allwd., Zone 1 lb. .17½ - —
f.o.b., Zone 2 lb. .18½ - —
dms., l.c.l., c.l., f.o.b., Zone 1 lb. .19½ - —
f.o.b. warehouse points, Zone 2 lb. .20½ - —
tankcars, Zone 1 lb. .19 - —
Zone 2 lb. .16 - —

Zone 1 is East of the Rockies. Zone 2, West of the Rockies.

Di-2-ethylhexyl adipate (see Di-iso-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-iso-octyl phthalate).
Diethylene glycol, dms., c.l., dlvd E, lb 17¾ — —
dms., t.c.l., same basis lb 19¼ — —
tanks, same basis lb 15¼ — —
Diethylene glycol diethyl ether, dms., c.l., works lb 51½ — —
dms., t.c.l., works lb .52¼ — —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾ — —
dms., t.c.l., works lb .32¼ — —
tanks, dlvd E lb. 28¼ - —
Diethylene glycol monobutyl ether acetate, dms., c.l., works, lb .30¾ — —
dms., t.c.l., works lb .31½ — —
tanks, dlvd E lb .28¾ — —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb .22½ — —
dms., t.c.l., dlvd lb .24 - —
tanks, dlvd E lb. 20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works, lb .27¼ - —
dms., t.c.l., works lb .28 - —
tanks, works lb .25¼ - —
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb .21 — —
dms., t.c.l., dlvd lb .22½ - —
tanks, dlvd E lb. 18½ - —
Diethylenetriamine, dms., c.l., dlvd, E lb. .44 - —
dms., t.c.l., dlvd E lb. .45½ - —
tanks, dlvd E lb. 41½ - —
Diethylstilbesterol, USP, bots, 10-kilo lots kilo 100.00 147.50
bots, 1 kilo lot kilo 110.00 152.50
Digitalis leaves, USP, dom., dms lb 1.25 — —
Digitoxin, USP, bots gram 4.20 — —
Diglycol laurate, dms., ton lots lb. .32½ - —
Diglycol stearate, dms., t.l. lb. .26 - —
Dimercaprol, bgs., c.l., t.l., works, lb .15½ - —
bgs., l.c.l., works lb. .16 - —
Dihexyl sebacate, dms., c.l., works, lb .66 - —
dms., t.c.l., works lb .67 - —
tanks, works lb .64 - —
Dihydrazine sulfate, dms., works lb. 1.10 1.25
Dihydrostreptomycin sulfate, bulk, gram .03 - —
1,2-Dihydroxy anthraquinone, dms., works lb 3.45 - —
2,2-Dihydroxy-5,5-dichloro diphenyl-methane, pure, dms lb 2.55 - —
Tech., dms., 20,000 lbs or more lb 1.11 - —
dms., 1,050 lbs. to 20,000 lbs. lb 1.13 - —
dms., 150 lbs. to 1,050 lbs. lb 1.15 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l. dlvd. lb. .18½ - —
tanks, dlvd lb. .14½ - —
Di-isobutyl phthalate, dms., c.l., dlvd E, lb. .31½ - —
dms., t.c.l., same basis lb. .32½ - —
tanks, same basis lb. 29 - —
Di-isobutylene, dms., c.l., dlvd E lb. .10 - —
dms., t.c.l., dlvd E lb. .11½ - —
tanks, dlvd E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., works lb. .28½ - —
dms., t.c.l., same basis lb. .30 - —
tanktrucks, 1,000-1,999 gals., works lb. .26½ - —
tankcars, tanktrucks, 2,000 gals., works lb. .26 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., t.c.l., works lb. .61¼ - —
tanks, works lb. .60 - —
Di-isopropanolamine, dms., c.l., dlvd, lb. .23¼ - —
dms., t.c.l., same basis lb. .24¾ - —
tanks, same basis lb. .20¾ - —
Di-isopropylamine, dms., c.l., dlvd, E of Rockies lb. .50½ - —
dms., t.c.l., same basis lb. .52 - —
tanks, same basis lb. 48 - —
Dillweed oil, dcm., bots., dms lb. 5.25 - —
Dimethyl anthranilate, cns. lb 4.15 - —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., dlvd lb 3.50 - —

Dimethyl ethanolamines, anhyd., dms., c.l. dlvd lb. 1.225 - —
dms., t.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms., c.l., dlvd., 100% basis, contained amines lb. .68½ - —
dms., t.c.l., dlvd., 100% basis. lb. .69½ - —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .29 - —
dms., t.c.l., works lb. .30½ - —
tanktrucks, 1,000-1,999 gals., same basis lb. .27 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26½ - —
Dimethyl sebacate, dms., c.l., works. lb 1.31 - —
dms., t.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½ - —
ret. dms., t.c.l., works lb. .18½ - —
tanks, works lb. .16½ - —
Dimethyl sulfide, dms., c.l., works, lb. .18 - —
dms., t.c.l., works lb. .18½ - —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald. 100% basis lb. .38 - —
dms., t.c.l., frt equald. 100% basis lb. .38½ - —
tanks, frt equald, 100% basis. lb. .28 - —
40% soln., dms., c.l., frt. equald. 100% basis lb. .35 - —
dms., t.c.l., frt. equald. 100% basis lb. .35½ - —
tanks, frt. equald. 100% basis. lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms., t.c.l. same basis lb. .29 - —
tanks, same basis lb. .26 - —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½ - —
dms., t.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms., frt. alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls., dlvd E. of Rockies. lb 1.56 - —

Dinitroaniline orange toner prices 1c higher W of Rockies.

m-Dinitrobenzene, 89°C., dms. lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld E lb. .17¼ - —
dms., t.c.l. frt. alld E. lb. .17¾ - —
tanks, frt. alld. E. lb. .17 - —
2,4-Dinitrophenol, bbls. lb. .41 - —
2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works lb. .42½ - —
dms., t.c.l., works lb. .43½ - —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld lb. .28½ - —
dms., t.c.l., frt. alld lb. .30 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½ - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
Dioctyl sebacate, dms., c.l., works. lb. .61¼ - —
dms., t.c.l., works lb. .62¼ - —
dms., l.c.l., works lb. .62¼ - —
tanks, works, dlvd. lb. .59¼ - —
1,4-Dioxane, dms., c.l. dlvd. E lb. .31½ - —
dms., t.c.l., dlvd E lb. .33 - —
tanks, dlvd E lb. .29 - —

Prices in the west are 2c. per lb. higher.

Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .34 - —
bgs., t.c.l., l.t.l., dlvd. E lb. .35 - —
Dipentene, dest.-dist., dms., c.l., works gal. .58 - —
dms., t.c.l., works lb. .62 - —
dms., t.c.l., ex whse. gal. .78 - —
tankcars, works gal. .41 - —
Steam dist., dms., c.l., works, South gal. .72 - —
dms., t.c.l., dlvd. New York gal. .91 - —
tanks, works, South lb. .55 - —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 - —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 - —
Diphenyl, bgs., c.l., t.l., works lb. .16¾ - —
bgs., t.c.l., works lb. .18½ - —
tanks, works lb. .15¾ - —
Diphenyl oxide perfume grade, cns. lb. .55 - .70
Diphenyl phthalate, dms., c.l., works. lb. .52 - —
dms., t.c.l., works lb. .54 - —
Diphenylamine, retd., flake, bgs., c.l., works frt. equald lb. .32 — —
bgs., t.c.l., same basis lb. .34 — —
Refd., fused, tanks, same basis lb. .29 - —
Refd., diphenylamine in dms., ½c. per lb higher
Diphenylguanadine, ngs., dms., ton lots, frt. alld lb. .49 - —
bgs., smaller lots frt alld lb. .50 - —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 - —
dms., t.c.l. frt alld. lb. .18½ - —
tanks, frt. alld lb. .14¼ - —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 - —
dms., t.c.l., same basis lb. .21½ - —
tanks, same basis lb. .18½ - —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.80 - —
Di-o-tolylguanidine, dms., ton lots, frt alld lb. .69 - —
dms., smaller lots, frt alld lb. .70 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt alld lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt equald lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., t.c.l., works, 100% basis, lb. 1.05 - —
tanks, same basis lb. .90 - —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd E lb. .75 - —
dms., t.c.l., t.l.t., same basis lb. .76 - —
Dodecylbenzene, dms., c.l., t.o.b., works, frt equald lb. .134 - —
dms., t.c.l. same basis lb. .144 - —
tanks, same basis lb. .11½ - —
Dodecylphenol, c.l., frt. alld lb. .22½ - —
dms., t.c.l., same basis lb. .23½ - —
tanks, same basis lb. .20 - —

Dodecylphenol prices on shipments to Western States are 2c per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Blue, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No. 3 lb. 31.30 -35.90
Red, FD&C, No. 1 lb 5.90 - 7.85
No. 2 lb 3.30 - 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.55 - 7.50

Dyes, coaltar, certified colors for drugs and cosmetics 500-lb and 1-lb. lots, dlvd:
Violet, FD&C, No. 1 lb. 15.65 17.60
Yellow, FD&C, No. 1 lb 9.15 11.00
No 5 lb 3.30 4.10
No 6 lb 3.30 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:
Black, D&C, No. 1 lb. 10.50 -10.95
Brown, D&C, No. 1 lb. 15.65 -16.10
Green, D&C, No. 5 lb. 15.65 -16.10
No 6 lb. 15.65 -16.10
No 7 lb. 14.35 -14.80
Orange, D&C, No. 3 lb 10.50 10.95
No 4 lb. 19.60 -20.05
No 5 lb 3.80 4.25
Red, D&C, No. 17 lb. 10.50 -10.95
No 18 lb 23.60 -24.00
No 19 lb. 15.00 -15.45
No 21 lb 3.90 4.35
No 22 lb 10.50 10.95
No 28 lb. 24.15 -24.65
No 33 lb. 17.00 17.45
Violet, D&C, No 2 lb. 15.65 16.10
Yellow, D&C, No. 7 lb. 10.50 10.95
No 8 lb 10.50 10.95
No 10 lb 13.05 13.50
No 11 lb 13.05 13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb lots, dlvd.:
Blue, Ext., D&C, No. 1 lb. 15.65 16.10
Green, Ext., D&C, No 1 lb 15.65 16.10
Red, Ext., D&C, No 1 lb 13.05 13.50
Yellow, Ext. D&C, No 1 lb 10.50 10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd No.:
11110 Brilliant scarlet BN lb 1.79 - —
13390 Fast blue SR lb 1.43 - —
14025 Yellow 2G lb 1.26 - —
14030 Orange R, extra, conc. lb 1.64 - —
14645 Chrome black F lb 77 - —
14720 Rubine XX, conc. lb 1.59 - —
15510 Orange Y, extra conc. lb 83 - —
15575 Orange HR lb 99 - —
15620 Fast Red A, conc lb 1.61 - —
15705 Chrome blue black R, conc. lb 1.12 - —
16150 Scarlet 2RL lb 1.22 - —
16255 Brilliant scarlet 3RN, conc lb 1.26 - —
16230 Fast light, orange 2G lb 1.39 - —
17590 Brown PG lb 3.00 - —
18050 Phloxine 2G lb 1.05 - —
18055 Fuchsine 6B lb 1.55 - —
18965 Fast yellow 2G lb 2.32 - —
19140 Yellow XX lb 2.48 - —
19555 Yellow NN, conc. lb 3.67 - —
20170 Brown Y lb 1.53 - —
20470 Blue black extra, conc lb 1.44 - —
21010 Brown, RX, conc lb 1.42 - —
22240 Scarlet B lb 2.81 - —
22310 Red FC lb 1.57 - —
22311 Brown MCW lb 1.47 - —
22610 Blue 2B, extra conc. lb 1.53 - —
23500 Red 4BX, conc. lb 1.80 - —
24410 Sky blue FF, extra, conc. lb 1.95 - —
24895 Brilliant yellow, conc. lb 3.27 - —
26360 Navy blue 3R, conc. lb 1.84 - —
26695 Black F, conc. lb 2.30 - —
26900 Milling Red 3R, conc lb 2.24 - —
27075 Neutral black 2B, conc lb 2.75 - —
27720 Gray L lb 2.18 - —
29185 Fast scarlet 4BNC lb 2.23 - —
30015 Diazo black VJ conc lb 2.48 - —
30045 Yellow brown K, extra lb 1.32 - —
30235 Black EB, 200% lb 1.53 - —
30295 Green BY, conc. lb 1.67 - —
35660 Brown B lb 2.89 - —
37565 Naphthol SWF lb 1.85 - —
40000 Yellow 2G lb 1.44 - —
41000 Yellow OX lb 2.45 - —
42000 Green V, crystals lb 2.73 - —
42040 Brilliant green G crystals lb. 3.62 - —
42090 Blue EG lb 1.85 - —
42100 Milling green 6B, conc. lb 4.78 - —
42640 Violet 4BXN lb 2.43 - —
43830 Brilliant blue, BBG lb 2.44 - —
44045 Blue B, extra conc. lb 3.61 - —
45170 Red BX lb 4.76 - —
50415 Nigrosine SSJ lb 1.03 - —
52015 Blue GXX lb 2.33 - —
58005 Alizarin red SC lb 3.64 - —
59700 Golden orange GFD, single paste lb 2.70 - —
59710 Flaming orange 6RD double powder lb 4.90 - —
59800 Dark blue BO, single paste, lb 2.28 - —
59825 Jade green NC supra, double paste lb 1.50 - —
61570 Alizarin green CG, extra lb 3.81 - —
63010 Alizarin blue SAPG lb 3.90 - —
63815 Alizarin blue black B lb 3.26 - —
69825 Blue BLFD double paste lb 2.76 - —
70800 Brown BR single paste lb 2.03 - —

Dyes, coaltar oil-soluble, 100-lb. drums, dlvd. No
12140 Oil scarlet BL lb 1.87 - —
12055 Oil orange 7078 V lb 1.38 - —
26120 Oil red N 1700 lb 1.94 - —
42535B Methyl violet base lb 1.88 - —
44045B Victoria blue base lb 4.06 - —
50415B Oil black 8603 lb .80 - —
61565 Alizarin cyanine green base, lb 6.13 - —
Spirit black RB lb 3.89 - —
Spirit brown GN lb 5.30 - —
Spirit orange R conc. lb 5.87 - —
Spirit red B conc lb 6.41 - —
Pr 517 Spirit yellow 2R conc lb 4.62 - —
Pr 554 Spirit blue THN lb 5.06 - —

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Echinacea root, bls. lb. 1.25 - —
Elm bark, grinding, bls. lb. .30 - .33
Powd., bbls., bxs lb. .60 - —
Select, bundles lb. .75 - —
Emetine hydrochloride, USP, bots. oz. 48.40 - —
Endrin, tech., dms., 100-lbs or more, 100% basis, dlvd. lb. 2.77 - —
Eosin red toner, bbls., works lb. 1.95 - —
Ephedrine syn., USP, anhyd., bots, 100-oz lots oz. .98 - 1.00
hydrous, bots., 100-oz. lots, oz. .92 - —
Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works oz. .75 - —
Ephedrine sulfate, USP, cryst., dms., 100-oz f.o.b. works oz. .73 - —
USP, powd., dms., 100-oz., same basis oz. .73 - —
Epichlorohydrin, dms., c.l., dlvd lb. .29½ - —
dms., t.c.l., dlvd. lb. .31 - —
tanks, dlvd. lb. .27 - —
l-Epinephrine base, syn., USP, bots., 100 gram lots gram .58 - —
Epsom salt (see Magnesium sulfate)
Erigeron oil, cns lb 11.00 - —
Ergot, NF, dms., tin-lined lb. 2.00 - —
Eserine salicylate, bots oz. 44.00 - —
Eserine sulfate, bots oz. 36.00 - —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .18½ - —
Wood-rosin type, dms., c.l., same basis lb .18½ - —
Ether (see specific product)
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., dlvd lb .15 — —
dms., t.c.l., dlvd lb .16½ — —
tanks, dlvd lb .12½ — —
95-98% dms., c.l., dlvd lb .15¼ — —
dms., t.c.l., dlvd. lb .16¾ — —
tanks, dlvd. lb .12¾ — —

Ethyl acetate, nat., ferment, 99%, dms., c.l., divd lb. .15½- —
dms., t.c.l., divd. lb. .17 - —
tanks, divd. lb. .13 - —
syn., 85-82%, dms., c.l., divd lb. .15 - —
dms., t.c.l., divd. lb. .16½- —
tanks, divd. lb. .12½- —
Ethyl acetate, syn., 95-98%, dms., c.l., divd lb. .15¼- —
dms., t.c.l., divd lb. .16¾- —
tanks, divd. lb. .12¾- —
99%, dms., c.l., divd. lb. .15½- —
dms., t.c.l., divd. lb. .17 - —
tanks, divd. lb. .13 - —
Ethyl acetoacetate, dms., c.l., divd. lb. 58½- —
dms., t.c.l., divd. lb. .60 - —
tanks, divd. lb. .56 - —
Ethyl acrylate, dms., c.l., t.l., divd. lb. .34¼- —
dms., t.t.l., divd. lb. .35¼- —
tanks, divd. lbm. 32¼- —
Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., divd. E. of Rockies gal. 20.63 - —
dms., t.c.l., same basis gal. 20.73 - 20.84
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., divd. E. of Rockies gal. .68 - —
dms., t.c.l., same basis gal. .78 - .89
tanks, same basis gal. .52 - —
Ethyl alcohol, absolute, 200 pf., tax paid, dms., divd. E. of Rockies gal. 21 75 —
dms., t.c.l., same basis gal. 21.85 - 21.96
tanks, same basis gal. 21.59 —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., divd. lb. .20 - —
dms., t.c.l., same basis lb. .21½- —
tanks, same basis lb. .17½- —
Ethyl benzoate, bots. lb. .75 - 1.00
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E lb. .43 - —
dms., t.c.l., frt. alld. E lb. .45 - —
tanks, frt. alld. E lb. .40 - —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms., t.c.l., t.l., works lb. .36¾- —
tanks, works lb. .34 - —
Ethyl butyrate, dms., works lb. .85 - 1.00
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000 lb lots or more, frt. alld. E lb. .73 - —
bgs., smaller lots, frt. alld E lb. .75 - —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots, frt. alld E. lb. .70 - —
Ethyl chloride, tech., cyls., works. lb. .20 - .23
dms., works lb. .18 - .20
tanks, works lb. .10 - —
Ethyl cinnamate, cns. lb. 3.15 - 3.35
Ethyl ethanolamies, mixed, dms., c.l., divd. E lb. .43½- —
dms., t.c.l., divd. E lb. .44½- —
tanks, divd. E lb. .41½- —
Ethyl ether, absolute, ACS, dms. lb. .27 - —
Anesthesia, USP, dealers, 1-lb. cns. lb. 1.01 - —
½-lb. cns. lb. 1.09 - —
¼-lb. cns. lb. 1.21 - —
Indust., dms., c.l., divd. lb. .13½- —
dms., t.c.l., divd. E. lb. .15 - —
tanks, divd E. lb. .11 - —
2-Ethyl hexoic acid, dms., c.l., t.l., divd. E lb. .37 - —
dms., t.c.l., t.t.l., divd. E lb. .38½- —
tanks, divd. E. lb. .34½- —
2 Ethyl hexoic acid, 1c. higher W. of Rockies.
2-Ethyl hexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E lb. .42½- —
dms., t.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev. Ore., Utah and Wash.
2-Ethylhexyl alcohol, dms., c.l., divd. lb. .23¾- —
dms., t.c.l, divd. lb. .25¼- —
tanks, divd. lb. .21¼- —
Ethyl iodide, cbys., works lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald. lb. .52 - —
dms., t.t.l., frt. equald lb. .52½- —
tanks, frt. equald lb. .50 - —
Ethyl morphine hydrochloride, USP, bots oz. 11.85 - —
Ethyl oenanthate, dms lb. 1.05 - 1.30
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO, dms., c.l., divd. lb. .44½- —
dms., t.c.l., divd lb. .46 - —
tanks, divd lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works, lb. 1.04 - —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
N-Ethyl-o-toluidine, bbls lb. .88 - —
Ethylamine (see Mono-, Di-, or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., t.c.l., frt. alld lb. .58 - —
tanks, frt. alld lb. .55 - —
Ethylbenzene, 99%, dms., c.l., t.l., frt. equald. lb. .14 - —
dms, t.c.l., same basis lb. .16 - —
tanks, same basis lb. .11½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., t.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Ethylene, contract, refy gate lb. .0475- .052
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., t.c.l., frt. equald lb. .31½- —
tanks, frt equald lb. .28½- —
Ethylene dichloride, dms., c.l., divd. lb .11½- —
dms., t.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., divd. E lb. .16 - —
dms., t.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms. c.l., divd. E lb. .22 - —
dms., t.c.l., divd. E lb. .23½- —
tanks, divd. E lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., divd. E lb. .21 - —
dms., t.c.l., divd. E lb. .22½- —
tanks, divd E lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., divd. E lb. .19½- —
dms., t.c.l., divd. E lb. .20½- —
tanks, divd. E lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., divd. E lb. .21 - —
dms., t.c.l., divd. E lb. .22½- —
tanks, divd E lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., divd. E lb. .29 - —
dms., t.c.l., divd. E lb. .29¾- —
tanks, divd E lb. .27 - —
Ethylene glycol monostearate, flake, 150-lb. etn lb. .33 - —
Ethylene oxide, dms., c.l., divd. E. lb. .21½- —
dms., t.c.l., divd. E lb. .24½- —
tanks, divd. E lb. .15½- —
Ethylene trichloride (see Trichloroethylene).
Ethylenediamine, 85-88%, dms., c.l., divd. E., 100% basis lb. .42 - —
dms., t.c.l., divd. E., 100% basis. lb. .43 - —
tanks divd E., 100% basis lb. .40 - —
Ethyl vanillin, 100-lb. fib. dms., 500-lb. lb. 5.65 - —
less than 500-lb. lb. 6.10 - —
Eucalyptol, USP, cns., dms lb. .85 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms. lb. .45 - —
NF, rectified, 80-85%, dms. lb. .53 - .62
Eugenol, tech., dms lb 1.45 - —
USP, dms. lb. 2.00 - —
Euphorbia herb, bls lb. .12 - .15

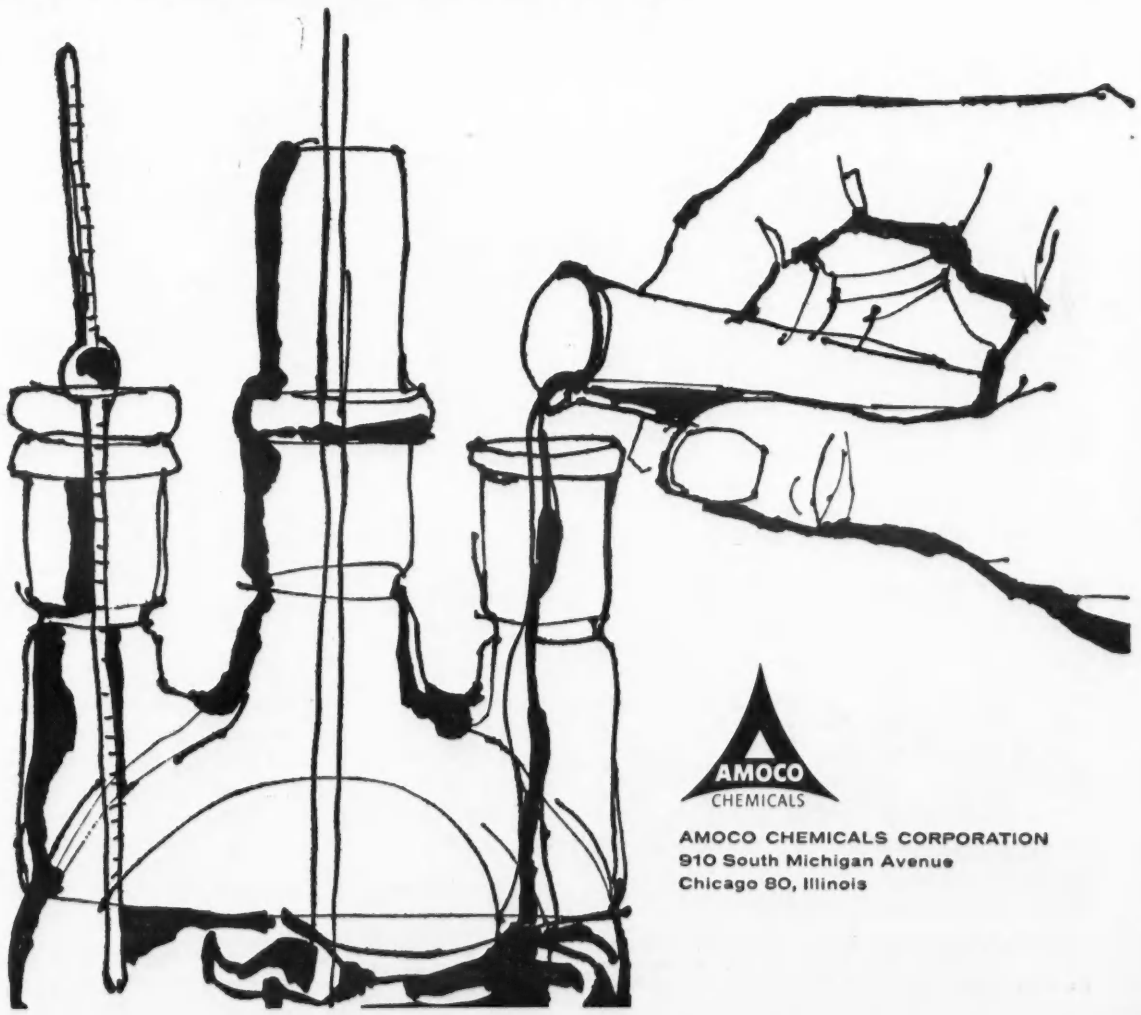
F

F salt paste, tech, dms., works lb 2.30 - —
Fennel oil, sweet, USP, cns. lb. 2.60 - —
Fennel seed, Argentine, bgs. lb. .16 - —
French, light, bgs. lb. .16 - —
Indian, light, bgs. lb. .17½- —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs lb. .16½- —
Fenugreek seed, Moroccan, bgs lb. .08 - —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms., t.c.l., works 100 lbs. 8.50 - —
Ferric chloride, indust., cryst., bbls., c.l., works 100 lbs. 5.25 - 6.75
bbls., t.c.l., works 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb. .08½- —
Ferric citrate, gran., dms lb. .86 - —
Ferric hypophosphite, NF, 175-lb. dm. lb. 4.25 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran. pearls, 225-lb. dm. lb. .79 - —
Ferric resinate, dms., ton lots, frt. alld. lb. .45 - —
lots, frt. ald. lb. .40¼- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., t.c.l., frt. alld lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton. 35.25 - —
bgs., t.c.l., works ton. 36.25 - 42.25
bulk, c.l., works ton. 33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .63 - .68
Green pearls, USP XII, gran., dms lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32¼- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 - —
bgs., t.c.l., divd. Metropolitan area 100 lbs 3.35 4.23
bbls., c.l., works ton 40.00 —
bulk, c.l., works ton. 27.00 —
USP, cryst., bbls., dms lb. .09½- .10
Fir balsam, Canada, bbls gal. 32.00 35.00
Oregon, bbls gal. 3.40 4.64
Fir oil, Canada, cns lb 1.75 2.50
Fish oil, refd., alkali, dms. lb. .1300- .1350
Kettle-bodied, dms. lb. .1530- .1580
Light-pressed, dms. lb. .1150- .1200
tanks lb. .10 - —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton. 92.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton. 88.00 - —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo lots or more gram. .30 - .44
10% feed grade, fib. dms., 3 kilos or more kilo. 30.00 - 44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., divd lb. .0695- —
tanks, divd. lb. .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, divd. lb. .0375- —

AMOCO OXO ALCOHOLS

HIGHEST ESTERIFICATION QUALITY

EACH SHIPMENT OF ISOOCTYL AND DECYL ALCOHOL IS TRIPLE CHECKED FOR QUALITY BY: 1. HIGH TEMPERATURE ESTERIFICATION WITH PHTHALIC ANHYDRIDE. 2. ACID COLOR WITH CONCENTRATED SULFURIC ACID. 3. ESTERIFICATION COLOR AFTER HEAT AGING. SKILLED TECHNICAL SERVICE AVAILABLE.



AMOCO CHEMICALS

AMOCO CHEMICALS CORPORATION
910 South Michigan Avenue
Chicago 80, Illinois

Formic Acid—Hydrastis

Formic acid, 85%, cbys., c.l., works, lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .65 - .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald lb. .23¼-
dms., l.c.l., frt equald lb. .24¾- —
Fumaric acid in bags ½c. per lb. less.
Furfural, dms. c.l. works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd E lb. .11½- —
tanks, dlvd. W lb. .12½- —
Furfuryl alcohol, cns., works lb. .28 - —
dms., c.l., t.l., Newark, N. J. lb. .20½- —
dms., l.c.l. t.l.l., Newark N. J lb. .21½- —
dms. c.l., t.l., Memphis, Tenn lb. .19 - —
dms., l.c.l., t.l.l., Memphis, Tenn. lb. .20 - —
tanks, Memphis, Tenn. lb. .175 - —
Fusel oil, refd. dms., c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd. lb. .19½- —
tanks, dlvd. lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF, VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
Imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsenium root, bls. lb. .30 - .35
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs lb. .30 - —
Powd., bbls. bxs. lb. .30 - —
Geraniol, extra cns., dms. lb 1.75 2.40
Soap grade, dms lb .90 1.75
Standard, cns., dms. lb 1.65 —
Synthetic dms lb 1.30 —
Geranium oil, Algerian, cns. lb 22.00 -23.00
Bourbon, cns. lb 26.00 -28.00
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate cns. lb 1.90 - 2.70
Synthetic, dms lb. 1.45 - —
Ginger oil, dist., bots lb 11.50 -14.00
Ginger oleoresin, NF, from African root, bots lb 4.25 - 5.00
NF, from Jamaican root, bots. lb 7.75 - —
Ginger root, Cochin, bgs. lb. .28 - —
Jamaican, No. 3, ngs lb. .28 - —
Nigerian, split, bgs lb. .22 - —
Sierra Leone, bgs lb. .33 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50% dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., l.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b. works lb. .17 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
Glue, bone, extracted, dry bone, 191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½- —
150-177, bgs., c.l., dlvd lb. .22½- —
178-206, bgs., c.l., dlvd lb. .25 - —
Glue, hide, 207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30½- —
267-296, bgs., c.l., dlvd lb. .32½- —
299-330, bgs., c.l., dlvd lb. .34½- —
331-362, bgs., c.l., dlvd lb. .36½- —
363-394, bgs., c.l., dlvd lb. .38 - —
Glue, hide, 395-427, bgs., c.l., dlvd. lb. .40 - —
428-460, bgs., c.l., dlvd lb. .42 - —
461-494, bgs., c.l., dlvd lb. .44 - —
495-529, bgs., c.l., dlvd lb. .46 - —
Hide glue, l.c.l., prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo. 150.00 -300.00
Bots., 50-kilo lots kilo. 100.00 - —
Bots. 500-kilo lots kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd. lb. .1870- —
nat., crude, soapiye, 80%, tanks, dlvd lb. .17 - .17¼
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb. .30⅞-
dms., l.c.l., dlvd. lb. .31⅛-
tanks, dlvd. lb. .29⅛- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .30 - —
dms., l.c.l., dlvd. lb. .30¾- —
tanks, dlvd. lb. .28¼- —
nat., high gravity, dms., c.l., dlvd lb. .30¾- —
dms., l.c.l., dlvd. lb. .31½- —
tanks, dlvd. lb. .29 - —
Glycerine, dom., syn., dms., c.l., dlvd lb. .31 —
dms., l.c.l., dlvd. lb. .31¾- —
tanks, dlvd. lb. .29¼- —
Imp., nat., crude, soaplye, 80%, c.i.f lb. .17½- —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb .40 - —
dms., l.c.l., same basis lb. .42 - —
tanks, same basis lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb .20½- —
dms., l.c.l., works lb. .21¼- —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb 3.10 - —
Gramicidin, 1 to 5 kilos, f.o.b works. gram. 4.25 - —
Grapefruit oil, dms lb. 4.00 - —
Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 - .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 .31
No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd lb. .09 - .09½
Yellow, tanks, dlvd. lb. .05 - .05½
Grease oil, No 1, dms., c.l. lb. .13¾- —
dms., l.c.l. lb. .14¾- .15¾
Extra winter, strained, dms., c.l. lb. .16¼- —
dms., l.c.l. lb. .17¼- .18¼
Prime, burning, dms., c.l. lb. .17¾- —
dms., l.c.l. lb .18¾ .19¾

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls. lb. .40 —
Guaiacol, NF, cryst., dms., tins lb 2.10 2.15
NF liq., cbys., dms. lb 2.30 2.40
Guaiacwood oil cns. lb .65 .80
Guaiacol carbonate NF VII, dms lb 3.40 3.45
Guar gum, food grade, bgs., c.l lb. .38 - —
bgs., 5,000 lbs or more lb. .39 - —
Indust., bgs., c.l. lb .32 - —
Tech grade, bgs. lb .30 - .33

GUMS

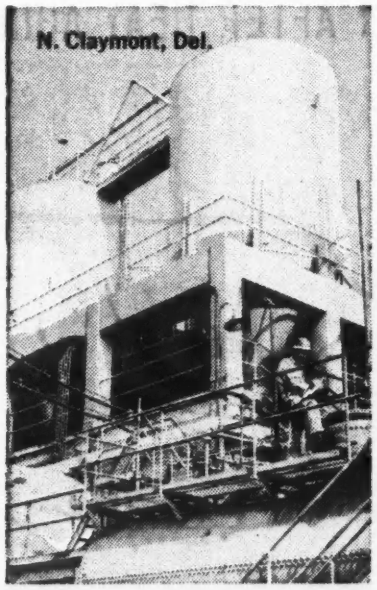
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

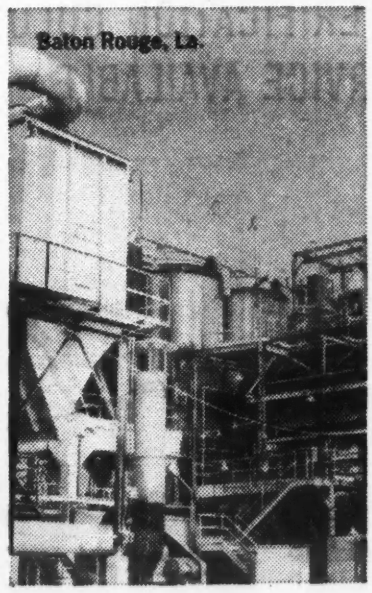
H

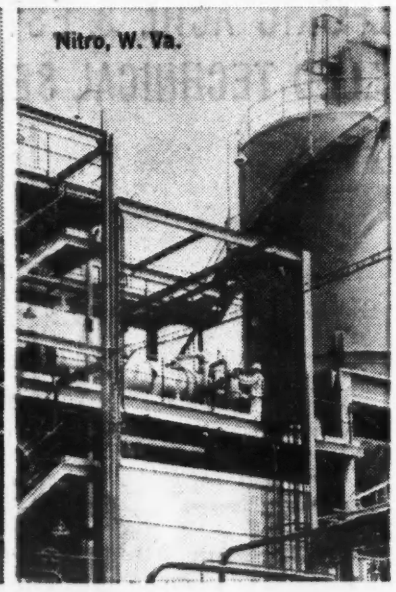
H acid, dry, bbls. c.l., frt. alld., 100% basis lb. 1.00 - —
bbls., l.c.l., same basis lb. 1.05 - —
Hansa yellow 10 G bbls., dlvd E. of Rockies lb 2.45 —
Hansa G yellow, pigment, bbls. lb. 2.20 - —
Hawthorn berries, bgs. lb. .18 - .20
Heliotropin 100-lb lots, dms. lb. 2.60 - 3.40
Hellebore root dom., green, bls lb. .70 - .75
Helonias root bls. lb. 1.50 - —
Hemlock oil, cns. lb. 2.55 - 3.00
Henbane leaves, bls lb. .40 - .45
Heptachlor dms., c.l., t.l., frt. alld., 100% basis lb. .96 - —
Heptane, indust., tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .1625- —
Hesperidin, purif. 100-lb fib. dms., f.o.b., works lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb lots, works lb. 22.50 - —
bots., 5-lb lots, works lb. 23.00 - —
bots., 1-lb lots, works lb. 23.50 - —
Hexachlorophene, dms., 1,100 lbs. or more lb. 1.84 - —
dms., to 1,100 lbs. lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or New York City lb. .233 - —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb lots, same basis lb. .243 - —
bgs., smaller lots, same basis lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib dms., smaller lots, same basis lb. .253 - —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48¾
Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .16 - —
l-Hexanol, dms., c.l., works lb. .35 - —
dms., l.c.l., works lb. .35¾- —
tanks, works lb .33 —
Hexyl cinnamic aldehyde, dms. lb. 3.95 - 4.00
n-Hexyl methacrylate, dms., c.l., works lb. .75½ —
dms., l.c.l., works lb. .76 —
Hexyl salicylate, dms. lb. 1.70 - 1.75
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd lb. .15 - —
Hexyiresorcinol, USP, dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms. smaller lots, dlvd lb. 14.50 - —
Homatropine hydrobromide, USP, bots oz 3.25 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia bulk, c.l., Chicago unit-ton 6.75 - —
Horehound herb, bls lb. .18 - .20
Hydrastis (see Goldenseal).

BASIC REASONS FOR MAKING GENERAL CHEMICAL YOUR "HQ" FOR HF

EXTENSIVE FLUORSPAR RESOURCES. Basic to the point of owning large fluorspar reserves as well as mines and mills, General Chemical is the nation's leading producer of hydrofluoric acid. By controlling its raw material resources, General Chemical protects you against interruptions of supply.







3 PLANTS. General Chemical produces anhydrous and aqueous hydrofluoric acid at the following three locations: North Claymont, Delaware; Nitro, West Virginia; and Baton Rouge, Louisiana.

5 STOCK POINTS. General has five bulk storage and packing stations in the United States for aqueous HF. Each backs up the others—assuring availability and prompt service at all times.

With its outstanding resources for essential raw materials—fluorspar reserves, mines and mills—plus a broad network of 18 sulfuric acid plants, General Chemical's *basic* position in hydrofluoric acid production is unmatched.

What's more, General is the *only* supplier offering shipment of hydrofluoric acid from more than one producing location. It supplies *anhydrous* and *aqueous* HF to its customers from *three* producing works and *aqueous* HF from an additional *five* company-owned locations.

Whenever and wherever you need hydrofluoric acid, call on General Chemical—your "HQ" for HF!

Allied Chemical

GENERAL CHEMICAL DIVISION
40 Rector Street, New York 6, N. Y.

Hydrazine hydrate, 85% ret. dms., works lb 1.35 - 1.55
100%, ret. dms., works lb 1.60 - 1.90
Hydriodic acid, purif., 47%, 2-chys., f.o.b. works lb 2.92 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼ —
dms., t.c.l., dlvd. zone 1 lb. .29¾ .30⅛
tanks, dlvd zone 1 lb .27¼ - —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys. frt equald lb .48 .56
Hydrochloric acid, anhyd (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs 2.50 - —
cbys., t.c.l., dlvd Metropolitan area 100 lbs 2.90 - 3.05
tanks, works, frt. equald ton 28.00 - —
20°, chys., c.l., works 100 lbs 2.75 - —
chys., t.c.l. dlvd Metropolitan area 100 lbs 3.15 - —
tanks, works, frt equald ton 30.00 - —
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs 3.25 - —
chys., t.c.l., dlvd. Metropolitan area 100 lbs 3.65 - —
tanks, works frt equald ton 35.00 - —
Hydrochloric acid CP, USP, consumers chys. extra, c.l., works lb. .15¾ - —
chys. t.c.l., same basis lb. .17¼ - .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis. lb. .20¾ - —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. 1.05 - 1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.10 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt bots., f.o.b works pt. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55 gal or 30 gal dms., c.l., t.l., dlvd 100 lbs 19.25 - —
55-gal dms., t.c.l., t.t.l., dlvd 100 lbs 20.75 - —
30-gal dms. c.l. t.l., dlvd 100 lbs 21.00 - —
Hydrofluoric acid, aqueous, 70%, 20-gal., dms., t.c.l., t.t.l., dlvd 100 lbs 22.50 - —
tanks works frt equald 100 lbs 13.40 —
Delivered prices apply to all states east of Arizona California Colorado Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming In those states add $2.70 per cwt. for drum delivery
Hydrofluosilicic acid dms. works, 30% basis lb. .07 - —
Hydroturatnide dms., fib ctns., works lb. .30 .40
50-lb cyls., t.c.l., works lb. .55 .60
Hydrogen chloride anhyd., 50-lb. cyls. t.c.l., works lb. .45 - —
Hydrogen cyanide liq., 98% tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½ .32½
cyls., dlvd W lb. .39 - —
tanks works lb. .12 - —
Hydrogen peroxide 35% dms., c.l., dlvd lb. .202 - —
dms., t.c.l. dlvd. lb. .211 - —
tanks, dlvd lb. .1800- —
Hydroquinone photo grade, dms., 50-lbs. f.o.b works lb. 1.10 - —
Tech., dms, c.l., dlvd. lb. .82½- —
dms. t.c.l. dlvd lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l. dlvd lb 2.59 - —
dms., t.t.l., dlvd lb 2.61 - —
Hydroxyacetic acid, tech., 70% dms Philadelphia and Chicago lb. .11 - —
tanks Belle W Va lb. .073 —
Hydroxycitronellol cns lb 4.85 5.75
Hydroxyethyl cellulose, add grades, fib dms., 20,000-lb. lots or more, f.o.b shipping point lb. .84 - —
fib dms. 2,000 to 19,999-lb lots, same basis lb. .89 - —
fib dms. 100 to 1,999-lb lots, same basis lb. .93 - —
fib dms. smaller lots, same basis lb 1.03 - —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots. oz. 7.75 - 8.50
Hyoscyamine sulfate, bots oz. 7.75 - 8.50
Hypophosphorous acid, purif., 50%, 10-chys. f.o.b works lb 1.95 - —
NF 50% 10-chys., same basis lb. 1.35 - —

I

Ichthammol NF, dms lb. .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.)
Indole CP bots. lb. 13.75 -15.00
Inositol, 50-100 lb dms., 1,000 lbs. or more, dlvd lb 4.50 - —
Inositol, 50-lb. dms., less than 1,000 lb., dlvd lb 4.75 - —
10 lb cns., 10-50 lbs dlvd lb 5.00 - —
5 lb bots., dlvd lb 5.25 - —
Insect flowers (see Pyrethrum)
Iodine, crude, kgs. lb. 1.10 - —
Resub., USP, dms., f.o.b. works lb. 2.20 - 2.22
Iodochlorohydroquinolin, USP, dms. lb 3.60 - —
Iodoform NF dms. 300-lbs., f.o.b. works lb 4.90 - —
dms. 100-lbs. same basis lb 5.05 - —
a-Ionone, cns lb 4.60 5.75
b-Ionone, cns lb. 4.15 6.15
Ipecac root, whole bgs. lb 8.00 8.50
Powd. bbls. bxs. lb 9.50 -10.00
Irish moss, bleached, prime, bls lb. .25 - .27
Iron blue alkali-resisting, bbls., c.l., dlvd E lb. .57 - —
bbls. t.c.l. ton lots same basis. lb. .58 - —
bbls., smaller lots, same basis lb. .59 - —
Dom., reg. bbls. c.l. dlvd E lb. .52 - —
Iron blue, alkali-resisting, dom., reg., bbls. t.c.l., ton lots, same basis lb. .53 - —
bbls. t.c.l. smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls. c.l. dlvd. E lb. .48 - —
bbls., t.c.l. ton lots, same basis lb. .49 - —
bbls., t.c.l. smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs. t.c.l., works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., t.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05½- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —

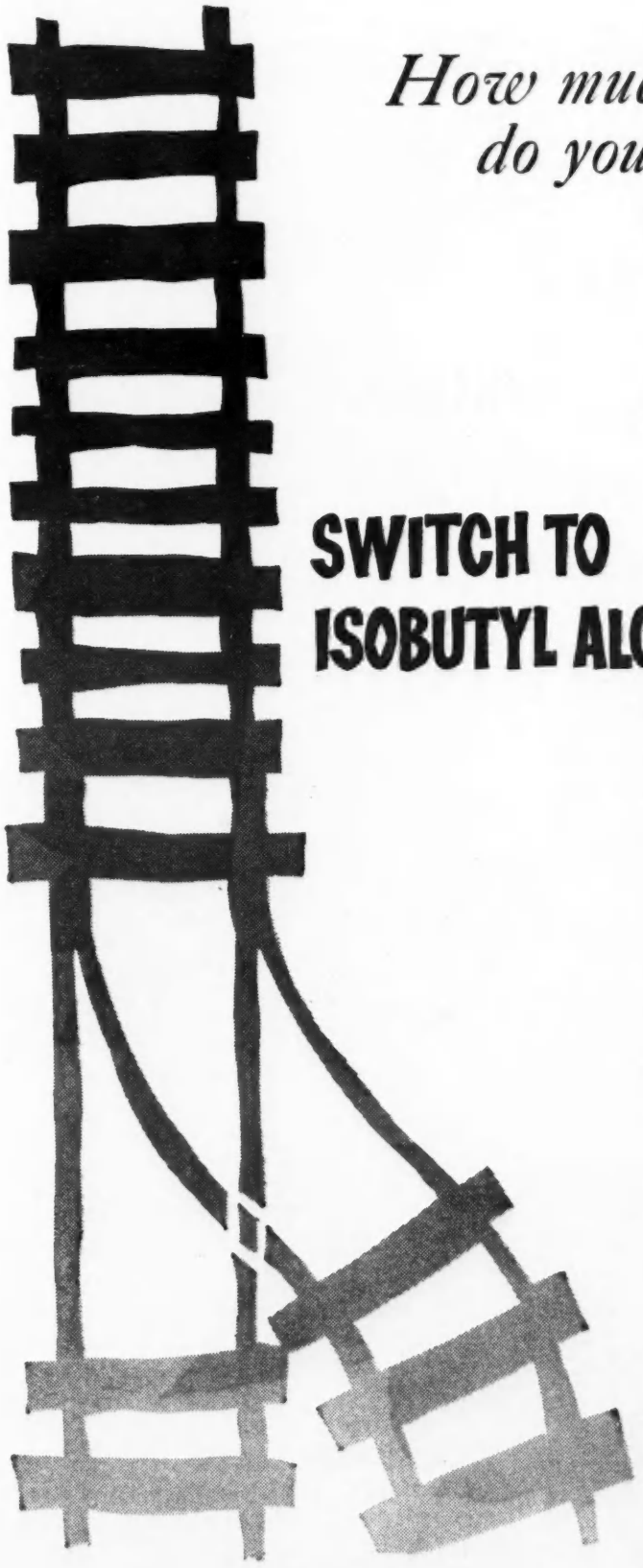
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red nat. 75-85% ferric oxide bgs., c.l., works lb. .06¼- —
bgs., t.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom
bbls., t.c.l. ex dock lb. .06 Nom
bbls., t.c.l., ex whse, New York. lb. .06½ Nom
Iron oxide yellow nat., French type, bgs., c.l., works lb. .06¾- .07
Peruvian type, bgs. t.c.l lb. .023 .024
Iron oxide, yellow pure, light lemon shade bgs c.l works lb .12¼- —
other shades, same basis lb. .12 - .12½
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol cns. lb 1.44 - 1.80
Isobornyl acetate cns lb 46 56
Isobornyl formate, dms lb. 1.15 - 1.20
Isobornyl propionate, dms lb. 1.20 - 1.25
Isobutyl acetate perfume grade, cns. lb. .30 - .35
Isobutyl acetate, solvent grade dms., c.l., dlvd E of Rockies lb. .15¼- —
dms., t.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., t.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Isobutylene, 99% tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., t.c.l., dlvd. lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., t.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .19¼- —

Isobutyric acid, dms., c.l., t.l., dlvd. lb. .33 - —
dms., t.c.l., t.t.l., same basis lb. .36½- —
t.c. t.t., same basis lb. .33 - —
Isobutyronitrile, dms., c.l., dlvd. lb. .47½- —
dms., t.c.l., dlvd lb. .48½- —
tanks, dlvd. lb. .45 - —
Isoeugenol, cns. lb. 3.40 - 4.25
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 - —
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., t.c.l., dlvd. E. lb. .25 - —
tanks, dlvd. E. lb. .21 - —
Isopentane, com'l. grade, tanks, f.o.b. Tex. refy gal. .16½- —
Isophorone, dms., c.l., dlvd lb. .24½- —
dms., t.c.l., dlvd lb. .25¼- —
tanks, dlvd. lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .18 - —
dms. t.c.l., same basis lb. .19 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., t.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., t.c.l., dlvd. gal. .63 - —
tanks, dlvd. gal. .42 - —

Isopropyl alcohol, refd., 95%, c.l., dms., dlvd gal. .60 - —
dms., t.c.l., dlvd. gal. .70 - —
tanks, dlvd. gal. .44 - —
anhyd., c.l., dlvd. gal. .62 - —
dms., t.c.l., dlvd. gal. .72 - —
tanks, dlvd gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., t.c.l., dlvd. lb. .11 - —
tanks, dlvd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb 1.00 —
dms., t.c.l., works lb. 1.05 1.25
tanks, works lb. .99 —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib dms., c.l., t.l., works lb. .75 —
450-lb fib dms., t.c.l., works lb .80 .90
Isoquinoline dms., works lb 65 1.25
Itaconic acid, refd., bgs. c.l., f.o.b. works lb. .40½ —
bgs., t.c.l., same basis lb. .50½- —
Tech., bgs., c.l., same basis lb. .34½- —
bgs., t.c.l., same basis lb. .35½- —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls. same basis lb 2.75 - —
Jalap root, NF bls. lb. .60 —
NF, powd., bbls., bxs. lb. .70 - .75



How much butyl alcohol do you use in a year?

The cost of many products and processes using butyl alcohol can be cut significantly through use of lower-priced Isobutyl Alcohol.

Obviously, the savings you obtain depends on your particular product or operation, but just to give you an idea of what can be done, look at the table below and estimate for yourself the cost reduction your company can realize in a single year by switching to Isobutyl Alcohol.

Eastman Isobutyl Alcohol costs 2½¢/pound less than the butyl derivative. This works out to a saving of $1,750 on a typical 10,000 gallon tank car. You take it from there.

SWITCH TO ISOBUTYL ALCOHOL AND SAVE

UP TO	IF YOU USE
$8,750	50,000 gallons
$17,500	100,000 gallons
$87,500	500,000 gallons
$175,000	1,000,000 gallons

Naturally, one of the questions you will want answered is: How will replacement of butyl alcohol with Isobutyl Alcohol affect your process or product? For general information bearing on the question, refer to our new booklet "Isobutyl Alcohol." It describes physical properties and performance characteristics of this economical solvent and reaction intermediate. For specific answers get in touch with the Eastman representative nearest you or write to our Customer Service Laboratory.

Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, N. C.; Houston; Kansas City, Mo.; New York; Philadelphia; St. Louis. **West Coast: Wilson & Geo. Meyer & Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Japan Wax—Lithium Manganite

Japan wax, ec.	lb.	.29	.31
Juniper berries, bgs.	lb.	.16	.17
Juniper berry oil, NF, bots.	lb	2.90	3.75
Twice rectified, bots.	lb	3.25	—
Juniper tar oil, NF, dms.	lb.	.42	.60
Juniper wood oil, tech., cns.	lb.	.38	.55

K

Kaolin (see also Clay, China).			
Kaolin NF, powd., fib. dms.	lb	.10	.12
NF, colloidal, 50-lb. bgs.	lb.	.15½	.17½
Karaya gum, No. 1, NF, powd., bls	lb.	.48	.50
No 2, powd., bbls.	lb.	.43	.45
No. 3, powd., bbls.	lb.	.37	.40
Koch acid, bbls., frt. alld., 100% basis	lb	1.00	—
Kola nuts, bgs.	lb.	.11	.12

L

L acid, bbls., works	lb.	1.25	—
Lacquer diluent, petroleum, 140°F. 200°F, b.r., tankcars, New Jersey and New York	gal.	.20	—
Group 3	gal.	.15125	—
Houston, Texas	gal.	.16	—
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York	gal.	.20	—
Group 3	gal.	.14125	—
Houston, Texas	gal.	.16	—
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald	lb.	.1985	—
bbls., dms., 20 or more, frt. equald	lb.	.2035	—
bbls., dms., 5 to 19, frt. equald.	lb.	.2085	—
bbls., dms., 1 to 4, frt. equald.	lb.	.2135	—
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald	lb.	.3335	—
bbls., dms., 20 or more, frt. equald	lb.	.3385	—
Lactic acid edible, 80%, bbls., dms., 5 to 19, frt. equald	lb.	.3435	—
bbls., dms., 1 to 4, frt. equald.	lb.	.3485	—
Plastic grade, 50%, c.l., bbls., works	lb.	.2740	—
bbls., 20 or more, works	lb.	.2790	—
bbls., 5 to 19, works	lb.	.2840	—
bbls., 1 to 4, works	lb.	.2890	—
80%, bbls., c.l., works	lb.	.4625	—
bbls., 5 to 19, works	lb.	.4725	—
bbls., 1 to 4, works	lb.	.4775	—
Lactic acid, tech., 44%, bbls., c.l., works..100 lbs.		12.45	—
bbls., l.c.l., works..100 lbs.		12.85	—
USP, 85%, cbys.	lb.	.85	—
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald	lb.	.14	—
bgs., 6,000-lb lots, frt. equald	lb.	.14½	—
bgs., 2,000-lb. lots, frt equald	lb.	.14¾	—
bgs., 200-lb. lots, frt. equald	lb.	.15¼	—
Edible lactose in fib. dms., ½c. higher.			
Lactose, ferment. grade, bgs., c.l., works	lb.	.06½	—
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald	lb.	.21½	—
fib. dms., 2,000-lb. lots, frt. equald	lb.	.22¼	—
200-1,880-lb. lots, frt. equald	lb.	.22¾	—
USP lactose in bags ½c. to 1c. lower.			
Lactose, USP, spray dried, bgs., t.l., frt. equald	lb.	.18½	—
bgs., t.t.l., frt. equald	lb.	.19	.19¾
Lady's slipper root, bls.	lb.	3.00	3.50
Lamp black, bgs., c.l., works	lb.	.16	.45
Lanolin, USP, anhyd., 400-lb. dms., works	lb.	.24	.26
USP, annyd., cosmetic, 400-lb. dms., works	lb.	.26	.30
USP, hydrous, 400-lb dms., works.	lb.	.20	—
Lard, cash, dms., Chicago	lb.	.1020	—
Lard oil (see Grease oil).			
Larkspur seed, bgs.	lb.	.55	—
Laurel leaf oil, dms., cns.	lb.	9.75	12.50
Laurent's acid, bbls	lb.	.70	—
Lauric acid, pure, dms.	lb.	.32¼	.34¾
tanks	lb.	.29¾	—
Lauryl alcohol, bots	lb.	2.00	2.50
n-Lauryl methacrylate, dms., c.l., t.l., works	lb.	.65½	—
dms., t.t.l., works	lb.	.66	—
Lavandin oil, 22-24%, dms.	lb.	1.10	1.50
Abrial, dms.	lb.	1.12	—
Lavender flowers, medium, bls	lb.	.55	.60
Ord., bls.	lb.	.20	.25
Select., bls.	lb.	.90	1.00
Lavender flower oil, USP, French, 35-37% ester, cns	lb.	1.85	4.00
40-42% ester, cns.	lb.	5.00	7.75
Spike, Spanish, cns.	lb.	2.20	3.00
Lead acetate, NF, cryst., gran., powd., bbls.	lb.	.34½	—
White, cryst., bbls.	lb.	.25½	—
gran., bbls.	lb.	.26½	—
powd., bbls.	lb.	.26½	—
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld. on $150 or more	lb.	.30½	—
1-lb bgs., same basis	lb.	.47	—
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld	lb.	.17	—
bbls., l.c.l., same basis	lb.	.18	—
Lead carbonate (see Lead, white, basic carbonate).			
Lead chloride, dms.	lb.	.52	—
Lead iodide NF, V jars	lb.	3.82	—
Lead linoleate, fused, 26.5% Pb, dms.	lb.	.38	—
Lead metal prime, pigs, New York.	lb.	.12	—
St. Louis	lb.	.1180	—
Lead monosilicate, bgs., c.l., works, frt. equald	lb.	.1385	—
bgs., t.c.l., same basis	lb.	.1485	—
Lead naphthenate, liq., 16% Pb., dms., dlvd.	lb.	.19½	—
24% Pb., dms., dlvd.	lb.	.24¼	—
Solid, 37% Pb., dms., dlvd.	lb.	.31¾	—
Lead nitrate, bbls.	lb.	.24¼	.26¾
Lead orthosilicate gel., 50-60% PbO, dms., works	lb.	.29¾	.34¼
Lead peroxide, tech. powd., bbls	lb.	.45	.50
Lead phthalate, dibasic, dms. works.	lb.	.41	—
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald.	lb.	.1475	—
bbls., t.c.l., same basis	lb.	.1575	—
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis	lb.	.1495	—
bbls., t.c.l., same basis	lb.	.1595	—
Lead, red, 98% Pb_3O_4, bbls., c.l., same basis	lb.	.1510	—
bbls., t.c.l., same basis	lb.	.1610	—
Lead, resinate, precip., 23%Pb, dms.,	lb.	.49	—
Lead salicylate, normal dms., works	lb.	.46	—
Lead silicate (see Lead white basic silicate).			
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld	lb.	.20	—
bgs., t.c.l., same basis	lb.	.21	—
Lead sulfate (see Lead blue basic sulfate).			
Lead tallate, liq., 16% Pb, dms	lb.	.17¼	—
24% Pb, dms	lb.	.21¼	—
Solid, 30% Pb, dms	lb.	.26¾	—
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld	lb.	.18	—
bgs., t.c.l., same basis	lb.	.19	—
basic silicate, bgs., c.l., shipt. pt., frt. alld	lb.	.16½	—
bgs., t.c.l., same basis	lb.	.17½	—
basic silicate, bgs., c.l., shipt. pt., frt. alld	lb.	.17	—
bgs., t.c.l., same basis	lb.	.18	—
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works.	lb.	.14	.15
non-ret. dms., t.c.l., same basis	lb.	.15	.16
Lecithin, edible, tech., unbleached, non-ret. dms., c.l., same basis	lb.	.13	.14
non-ret. dms., t.c.l., same basis	lb.	.14	.15
Lemon bioflavonoid complex, 100-lb. package, works	lb.	6.45	—
Lemon oil, USP, Calif., cns., dms.	lb.	1.25	1.50
Messina, cns.	lb	3.25	4.00
Lemongrass oil, cns., dms	lb	2.10	—
di-Leucine, dms., 1 kilo, works	kilo.	50.00	—
Licorice root, gran., bls.	lb	.13	—
Powd., bls.	lb	.15	.16
Whole, bls.	lb.	.09	.10
Lignaloe wood oil, Mexican, cns	lb.	2.75	3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)			
Lilac oil	lb.	1,500.00	
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E.	ton.	14.25	—
Chemical, hydrated, bgs., c.l., same basis	ton.	17.25	—
spray, bgs., c.l., same basis	ton.	18.25	—
For New York delivery, add $6.29 freight charge			
Lime oil, dist., Mexican, cns.	lb.	5.35	5.60
West Indian, cns.	lb.	5.00	5.60
Expressed West Indian, cns.	lb.	7.75	8.75
Lime salts (see Calcium).			
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).			
Linalool, ex bois de rose oil, dms.	lb.	2.45	4.25
Syn., 98-100%, dms., works	lb.	2.40	2.75
Linalyl acetate, ex bois de rose, 90-92%, dms	lb.	2.65	4.50
96-98%, dms.	lb	3.25	—
Syn., 98-100%, dms., works	lb.	2.75	—
Lindane, 25% formulation, to distributors, dms., frt. alld.	lb.	1.35	1.50
Lindane, tech., to formulators, 250-lb. dms., 5,000 lbs., dlvd.	lb.	2.13	—
100-lb. dms., 5,000-lbs., dlvd.	lb.	2.15	—
250-lb. dms., less than 5,000-lbs., dlvd	lb.	2.18	—
100-lb. dms., less than 5,000-lbs., dlvd	lb.	2.20	—
Linden flowers, with leaves, bls.	lb.	.35	.40
Without leaves, bls.	lb.	.42	.45
Linseed meal, expeller, 32% bulk, Minneapolis mills	ton.	58.00	—
Extracted, 34% bulk, same basis.	ton.	52.00	—
Linseed oil, raw, dms., c.l., New York	lb.	.1590	—
dms., l.c.l., New York	lb.	.1680	.1730
tanks, f.o.b Minneapolis	lb.	.1230	—
tanks, New York	lb.	.1341	—
tankwagon, New York	lb.	.1401	—
Boiled linseed oil, .006c. per lb. higher.			
Linseed oil, acid, dist., dms.	lb.	.1980	—
Water-white, dms.	lb.	.2280	—
Litharge, comi., powd., bbls., c.l., works, frt. equald	lb.	.1425	—
bbls., l.c.l., same basis	lb.	.1525	—
Lithium aluminum hydride, lump, dms., works	lb.	33.00	39.00
Lithium benzoate, dms.	lb.	1.65	1.67
Lithium bromide, NF, gran., bgs., works, frt. equald	lb.	2.60	—
Lithium carbonate, NF, dms., c.l., t.l., dlvd	lb.	1.29½	—
dms., ton lots to t.l., dlvd	lb.	1.30	1.30¼
Tech., dms., c.l., frt. alld	lb.	.67	—
dms., t.l., same basis	lb.	.73	—
dms., ton lots, same basis	lb.	.76	—
dms., smaller lots, f.o.b., plant.	lb.	.81	—
Lithium chloride, CP, anhyd., dms., ton lots	lb.	1.23½	—
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld	lb.	.87	—
dms., l.c.l., same basis	lb.	.88	.92
Lithium citrate, NF, dms., ton lots.	lb.	1.50	—
Lithium fluoride, dms., 20,000-lb. lots, dlvd	lb.	1.75	—
bbls., ton lots and more, dlvd	lb.	1.85	—
bbls., less ton lots, dlvd	lb.	1.90	—
Lithium hydride, powd., dms., 500-lbs. lots or more, works.	lb.	9.50	—
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld	lb.	.72	—
dms., l.c.l. frt. alld.	lb.	.73	—
Lithium manganite, dms., works	lb.	.95	1.05

One oil guarantees
full lemon flavor
every single time
It's Exchange Lemon Oil U.S.P., California Cold Pressed. Here is lemon flavor as it should be—full of the aromatic pungency of California's best lemons. And it's uniform—the same, batch after batch. Only the Sunkist Growers, with the world's largest stocks of coastal, highland and desert-grown lemons at their command, could produce an oil with such consistent flavor balance.
Always look for "Exchange" on the tamper-proof container seal—your guarantee it was pressed and packed by the Sunkist Growers. You can depend on it.
Sunkist Growers
Products Sales Department, Ontario, California
Exchange Brand Lemon Oil is distributed in the U.S. by Dodge & Olcott, Inc.; Fritzsche Brothers, Inc.; Ungerer & Co.
Exchange

Lithium nitrate, tech., dms., 100-lb. lots lb. 1.18 - 1.25
Lithium salicylate, dms. lb. 1.60 - 1.70
Lithium silicate, dms., works lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works, lb. .47½- —
dms., ton lots, works lb. .48½- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate dms., 100-lb. lots, lb. 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure, bbls., works lb. 1.50 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone ord., bgs., c.l., dlvd. E. lb. .08¾- —
bgs., l.c.l., dlvd. E lb. .09½- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l. dlvd. lb. .12 - —
Lobelia herb, bls. lb. 1.10 - 1.15
Loheline sulfate, bots., 50-oz. lots, works oz. 30.00 - —
Locust bean gum, powd., bgs. lb. .35 - .40
Lycopodium, cs. lb. 3.25 - 3.50
1-Lysine monohydrochloride, 25-lb. dms lb. 4.95 • —

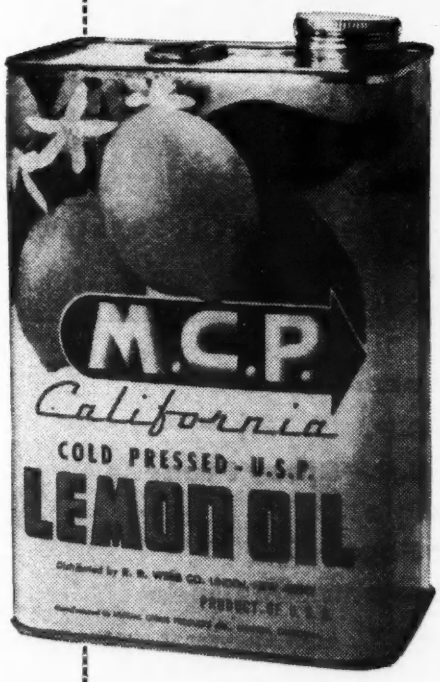
M

Mace, Siauw, No. 1, bls. lb. 1.60 - —
No. 2, whole, bls. lb. 1.40 - —
siftings, bls lb. 1.35 - —
Mace oil, dist., cns., dms lb. 9.00 -11.00
Magnesia, calcined, tech., bgs., c.l.s., frt equald lb. .25¾- .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., t.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs., c.l., f.o.b Luning, Nev ton. 39.50 • —
91%, bgs., c.l., same basis ton. 49.50 • —
95%, bgs., c.l, same basis ton 59.00 - —
USP, light, bgs. lb. .36½- .37½
USP, heavy, bgs. lb. .36½- .37½
Magnesite chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton. 86.25 • —
Chemical grade, deadburnt, standard grain, bulk., c.l., Chawelah, Wash. ton. 46.00 • —
Magnesium bromide, 80-lb. dm., f.o.b. works lb. 1.15 • —
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt equald lb. .14 - —
bgs., l.c.l., frt. equald lb. .15 16
• Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works ton. 60.00 - —
bgs., l.c.l., works ton. 75.00 -100.00
Magnesium gluconate 100-lb. dm., f.o.b. works, E lb. 1.42 • —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., t.t.l., frt alld. lb. .23½- —
tanks, frt. alld. lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 • —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, frt. alld on carlots lb. .59 • —
Magnesium nitrate, cryst., dms., works lb. .29 • —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls. lb. .75 • —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb .10½- .13
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs, t.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 • —
bgs., t.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 • —
bgs., smaller lots 100 lbs. 3.35 • —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 • —
fib. dms., 1,000-lb. lots lb. .40 • —
fib. dms., 100-lb. lots lb. .45 • —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green, straight, PTA, bbls., works lb. 5.30 • —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., frt. equald lb. .24 • —
dms., t.c.l., frt. equald lb. .25½- —
tanks, frt equald lb .22½- —
Maleic anhydride in bags ½c. per lb less.
Malic acid, tech., dms lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 • —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .45 • —
Manganese acetate, dms., dlvd lb. .35 • —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 • .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton. 149.00 • —
40,000 to 99,999-lb. lots, paper bgs., same basis ton. 144.50 • —
40,000 to 99,999-lb. lots, dms. same basis ton. 152.50 • —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $2 per ton higher.
Manganese gluconate, dms lb. 1.84 • —
Manganese hydrate, dms., dlvd lb. .35 • —
Manganese hypophosphite, NF, dms. lb. 3.52 • —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E lb. .34½- —
dms., ton lots, dlvd. E lb. .37 - —
dms., smaller lots, dlvd E. lb. .39 • —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms lb. 29¼- —
Precip., 6½-7% Mn, dms. lb. .42 • —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S., E ton. 86.50 • —
bgs., l.c.l., dlvd. S., E ton. 93.50 • —
Manganese tallate, 6% dms. lb. .26½- —
Manila copal gum, C, bgs lb. .35 - .39
DBB, bgs. lb. .25 - .28
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 - .24
WS, bgs lb. No stocks.
Mannitol, com'l, fib dms., ton lots, works lb. .60 - —
fib. dms., to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms. lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 - —
Menadione, USP bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .06 - —
Menthol, nat., USP, Brazilian, large crystals, cs lb. 9.00 • —
Nat., USP, Brazilian, regular crystals, cs lb. 8.85 • —
Japanese, cs lb. 12.00 • —
Syn., USP, racemic, 25-lb. lots lb. 4.25 • —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 • —
bgs., fib. dms., less ton lots, same basis lb. .48 • —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 • —
bgs., fib. dms., less ton lots, same basis lb. .58 • —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb. 4.08 • —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 3.78 • —
Mercuric cyanide, NF VIII. powd., fib. dms lb. 5.84 • —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works lb. 6.97 • —
Mercuric oxide, red, NF IX. 50-lb. dm., 100 lbs., f.o.b. works. lb. 4.72 • —
tech., 50-lb. dm., 100 lbs., same basis lb. 4.52 • —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis. lb. 4.89 • —
tech., dms., 100 lbs lb. 4.35 • —
25-lb. fib dm. lb. 4.38 • —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF, 100-lb. dm. f.o.b works lb. 8.22 • —
Mercury, ammoniated (see White precipitate USP XV).
Mercury metal, 76 lbs. per flask, net-flask 209.00 -212.00
Mesityl oxide, dms., c.l., dlvd lb. .15 —
dms., t.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98%, dms. truckloads frt. equald lb. .42½- —
dms., smaller lots, frt equald. lb. .43 - .75
tanks, works frt. equald lb. .40 - —
tanks, frt alld gal. .85 - —
Methanol, nat, denaturing grade, Syn., zone 1, dms., c.l., or t.l. min., dlvd gal. .51½- —
dms., t.c.l., dlvd. gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .33 • —
tankwagon, 4,000 gal. min., dlvd gal. .30 • —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 • —
Methanol, syn., zone 2, dms., c.l., or t.l., min. frt. alld. or dlvd. gal. .55½- —
dms., t.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 • —
tanks, 4,000 gal. min., dlvd. gal .34 • —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

ONE LABEL — *First Grade Only*

ONE PRICE — *That Saves You Money*

. . . and Perfect Performance for *Every* Purpose!



M. C. P.

Pure
Unadulterated
California

LEMON OIL

U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Methapyrilene Fumarate—Monoallylamine

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 - —
Methenamine (see Hexamethylene-tetramina).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms, t.l., frt alld lb 1.10 - —
dms., l.t.l., same basis lb 1.16 - —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb 3.50 - —
Feed grade, 98% fib dms. same basis lb. 1.43 - —
Methoxychlor 50% wettable powder, dealers, dms., cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., divd zone 1 lb. .21½ - —
non ret dms., l.c.l., same basis lb. .22 .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., divd zone 1 lb. .23½ - —
non-ret dms., l.c.l., same basis. lb. .24 - 24½

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

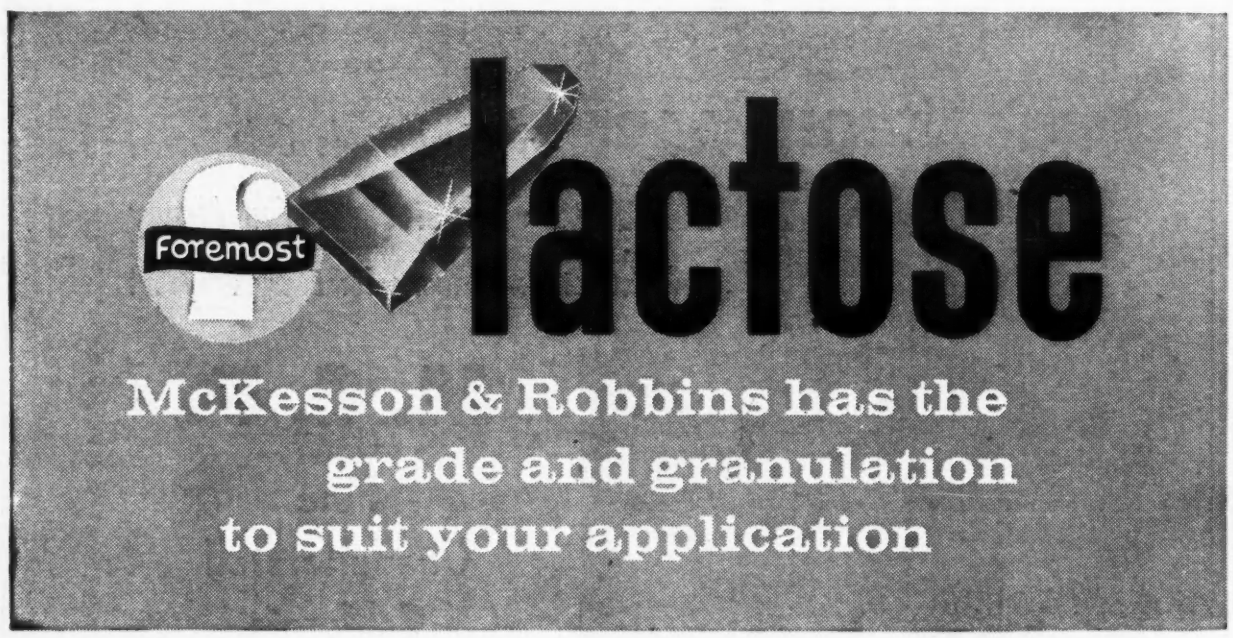
Methyl acetone, nat., dms., l.c.l., E of Miss., frt alld gal. .62½ - —
Methyl acetone, syn., dms., c.l., frt, alld E gal. .66 - —
Methyl acetone, syn., dms., l.c.l., frt. alld. E gal. .76 - —
tanks, frt. alld. E gal. .51 - —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., divd. lb. .36¼ - —
dms., l.t.l., divd lb. .35¼ - —
tanks, divd. lb. .32¼ - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., divd. E lb. .17 - —
dms., l.c.l., divd. E lb. .18½ - —
tanks, divd. E lb. .14½ - —
Methyl amyl alcohol, dms., c.l., divd. lb. .17 - —
dms., l.c.l., divd. lb. .18½ - —
tanks, divd. lb. .14½ - —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼ - —
N-Methylaniline, tech., tanks, frt. alld lb. .60 - —
Methylanthranilate, cns. lb. 2.25 - 2.45
Methyl benzoate, cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .72
on 100 lbs lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,-400 cps.) 50-lb. bgs., c.l., frt. alld. lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld. Methyl chloride, indust., cyls., frt. equald lb. .32¼ - —
tanks, multi-unit, same basis. lb. .16¼ - —
tanks, single unit, same basis. lb. .12¾ - —
Methyl chloride, refrigerator mfrs., cyls., divd lb. .48¾ - —
Other consumers or service men, cyls., divd lb. .67¾ - —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., divd lb. .15 - —
dms., l.c.l., divd lb. .16½ - —
tanks, divd. lb. .12½ - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .45¾ - —
tanks, works lb. .43 - —
Methyl formate, refd., dms lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works, lb. .21½ - —
100-lb. multiwall paper bgs., l.t.l., works lb. .23 - —
Methyl heptin carbonate, bots lb. 27.75 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isoamyl ketone, dms., c.l., divd. lb. .20 - —
dms., l.c.l., divd. lb. .20½ - —
tanks, divd. lb. .17½ - —
Methyl isobutyl carbinal (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., divd. lb. .17 - —
dms., l.c.l., divd lb. .18½ - —
tanks, divd lb. .14½ - —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va. lb. .31 - —
dms., smaller lots, same basis lb. .31½ - —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns. lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼ - —
dms., l.c.l., same basis lb. .62½ - .67½
Methyl testosterone, USP, 100-gram. bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works lb. 1.32 - —
5-39 dm. lots, same basis lb. 1.37 - —
tanks, same basis lb. 1.27 - —
Methyl violet toner, molybdated, PMA, bbls., divd. E of Rockies lb. 2.80 - —
Tungstated, PTMA, bbls., same basis lb 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 4.67 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., divd lb. .13½ - —
dms., l.c.l., t.l.l., divd lb. .15¾ - —
tanks, 4,000-gal. min., divd lb. .12¼ - —
tanktrucks, 1,000-gal. min., divd. lb. .13¼ - —
b-Methylnaphthalene, 32°C., m.p., dms., works lb .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½ - —
bgs., l.c.l., ex-whse. lb. .07¼ - —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼ - —
bgs., l.c.l., ex-whse or freight alld. E lb. .09 - —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., l.c.l., ex-whse. or frt. alld. E lb. .08¾ - —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾ - —
bgs., ex-whse. or frt. alld. E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E. lb. .08¼ - —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .31
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160 - .0672
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .65 - —
50-65 vis., non-ret. dms., l.c.l., basis gal. .70 - —
tankcars, refy. gal. .49 - —
Mineral oil, white, tech., 65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret. dms., l.c.l., same basis gal. .70 - —
tankcars, refy. gal. .49 - —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .66 - —
non-ret. dms., l.c.l., same basis gal. .71 - —
tankcars, refy. gal. .50 - —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 - —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., l.c.l., same basis gal. .77 - —
tankcars, rfy. gal. .56 - —
Mineral oil, white, NF, 145-155 vis., 5 non-ret. dms., c.l., same basis gal. .78 - —
non-ret. dms., l.c.l., same basis gal. .83 - —
tankcars, refy. gal. .62 - —
Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½ - —
non-ret. dms., l.c.l., same basis gal. .85½ - —
tankcars, refy gal. .64½ - —
Mineral oil, white, USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½ - —
non-ret. dms., l.c.l. gal. .87½ - —
tankcars, refy gal. .66½ - —
Mineral oil, white, USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½ - —
non-ret. dms., l.c.l. gal. .92½ - —
tankcars, refy. gal. .71½ - —

(For f.o.b N. Y. add 2c. for tankcars; 2c. for c.l., and 3c. for l.c.l. non-ret. dms.).

Mineral orange, American, bbls., c.l., works lb. .17 - —
bbls., c.l., same basis lb. .18 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875 - —
Houston, Texas gal. .145 - —
Mineral spirits, 140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston, Texas gal. .17 - —
Mink oil, dms. lb. 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .12½ - .13
tanks, New York gal. .14 - .14½
Molybdated orange, bbls. lb. .49 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech., chemical, dms., works, basis Mo content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms., works. lb. 1.05 - 1.18
Monoallylamine, dms., c.l., divd lb. .965 - —
dms., c.l., divd. lb. .995 - —
tanks, divd. lb. .96 - —



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- Crude Milk Sugar
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DIVISION OF FOREMOST DAIRIES, INC.

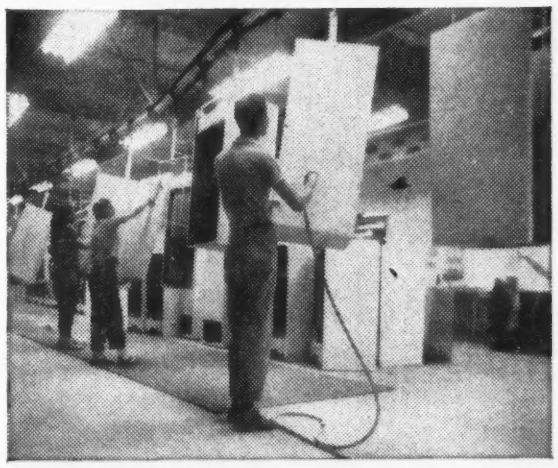
Monobutylamine, dms., c.l., dlvd. E. of Rockies	lb.	.57½	—
dms., l.c.l., same basis	lb.	.59	—
tanks, same basis	lb.	.55	—
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	.55	—
dms., l.c.l., works	lb.	.56	—
tanks, works	lb.	.54	—
Monochloracetic acid, purif. (see Chloroacetic acid, mono).			
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E	lb.	.10½	—
dms., l.c.l., same basis	lb.	.11½	—
tanks, same basis	lb.	.08¾	—
Monoethanolamine, dms., c.l., dlvd. E	lb.	.27½	—
dms., l.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Monoetnyialphanaphthylamine (see			
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E, 100% basis	lb.	.38½	—
dms., l.c.l., dlvd. E., 100% basis.	lb.	.40	—
tanks, dlvd. E., 100% basis	lb.	.33	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).			
Monoisopropanolamine, dms., c.l., dlvd. E	lb.	.27½	—
dms., l.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Monoisopropylamine, anhyd., dms., c.l., dlvd	lb.	.33½	—
dms., l.c.l., same basis	lb.	.35	—
tanks, same basis	lb.	.31	—
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis	lb.	.30	—
tanks, 100% basis	lb.	.26	—
30-35% soln., dms., c.l., frt. equald., 100% basis	lb.	.36	—
Monomethylamine, 30-35% soln., dms., l.c.l., frt equald, 100% basis	lb.	.36½	—
tanks, frt. equald., 100% basis.	lb.	.26	—
40% soln. dms. frt. equald., 100% basis	lb.	.33	—
dms., l.c.l., frt. equald., 100% basis	lb.	.33½	—
tanks, frt. equald, 100% basis.	lb.	.26	—
Monopentaerythritol, tech., bgs., c.l., dlvd. E	lb.	.31	—
bgs., l.c.l., dlvd. E	lb.	.32	—
Monopotassium glutamate, dms., 1,000-lb lots, frt alld	lb	3.05	—
dms., 100-lb lots, same basis	lb.	3.25	—
Monosodium glutamate, dms., dlvd.	lb.	1.07	1.15
Monosodium phosphate (see sodium phosphate, monobasic).			
Montan wax, Calif., refd., bgs	lb.	.27	.28
Imp., crude, Bohemian, bgs	lb.	.25	.26
German, bgs.	lb.	.25	.26
Morphine, cns., 100-oz., f.o.b. works.	oz.	12.35	—
Morphine hydrobromide, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morphine sulfate, USP, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morpholine, dms., c.l., dlvd. E	lb.	.55¼	—
dms., l.c.l., dlvd. E	lb.	.56¼	—
tanks, dlvd E	lb.	.52¾	—
Muriatic acid (see Hydrochloric acid).			
Musk, syn., ambrette, fib. dms., 100-lb. lots	lb.	4.40	4.90
cns., 25-lb lots	lb.	4.50	5.00
Ketone fib. dms., 100-lb. lots	lb.	4.60	5.10
cns., 25-lb lots	lb.	4.70	5.20
Xylol, fib. dms., 100-lb. lots	lb.	1.26	—
cns., 25-lb lots	lb.	1.40	—
Mustard seed, Danish, yellow, bgs.	lb.	.12	—
Montana, yellow, bgs	lb.	.10½	—
Oriental, bgs	lb.	.08	—
Mustard oil, syn., bots	lb.	1.60	1.85
Myristic acid, bgs.	lb.	.25¼	.27¾
tanks	lb.	.24¼	—
Myrrh gum, cs	lb.	.65	.75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).			
Naphtha, VM&P, petroleum, tank-cars, New Jersey and New York	gal.	.19	—
Group 3	gal.	.13875	—
Houston, Texas	gal.	.155	—
Naphthalene, crude, dom., 78°, tanks, frt. equald	lb.	.06	—
imp., 78°, bgs., large lots	lb.	.09½	Nom.
Refd., indust., chipped, crushed, bgs., frt. equald	lb.	.13½	—
tanks, same basis	lb.	.10¾	—
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis.	lb.	.15½	—
cs., 50 lbs., c.l., same basis.	lb.	.15¾	—
1-lb pkgs., c.l., same basis.	lb.	.18½	—
a-Naphthol, dms., frt. alld	lb.	1.02	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.34	—
bbls., l.c.l., works	lb.	.36	—
Naphthol, ITR, red toner, bbls., works	lb	5.00	—
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)			
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid).			
1-Naphthol-5-sulfonic acid (see L acid)			
1-Naphthol-5-sulfonic 8-amino acid (see S acid).			
2-Naphthol-6,8-disulfonic acid (see Gamma acid).			
Naphthol sulfonic mixed acid (see Cleve's acid).			
a-Naphthylamine, dms., frt. alld	lb.	.52	—
b-Naphthylamine, tech., flake, bbls., works	lb.	1.60	—
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)			
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid).			
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).			
2-Naphthylamine-7-sulfonic acid (see F acid)			
Naringin, fib dms.	lb.	8.50	—
Neatsfoot oil, 15° cold test, dms	lb.	.29	Nom.
20° cold test, dms.	lb.	.28	Nom.
30° cold test, dms.	lb.	.27	Nom.
Neocinchophen, USP, dms., frt, adjusted	lb.	7.00	8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity	gram.	.25	—
fib. dms. 100-999-gram lots, basis activity	gram.	.30	—
Tech., fib dms.	gram.	.13½	—
Neopentylglycol, dms., c.l., dlvd	lb.	.32	—
dms., l.c.l., same basis	lb.	.33	—
Nerol, dms.	lb.	4.75	—
Neroli oil, NF, French, bots	lb.	425.00	575.00
Tunisian, bots.	lb.	400.00	—
Nerolin, cns.	lb.	2.45	2.85
Neville and Winther's acid, dms., frt. alld	lb.	1.40	—
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd.	lb.	.68½	.75½
Nickel carbonate, bbls., dlvd	lb.	78¼	.85¼
Nickel chloride, bbls., dlvd.	lb.	.37	.45
Nickel formate, bbls., ton lots, frt. alld	lb.	.72	.73
Nickel metal, electro cathodes, cs., works	lb	.74	—
Nickel nitrate, dms., frt. alld	lb.	.31½	.33½
Nickel oxide, black, bbls.	lb.	.85	—
Green, bbls.	lb.	.84	—
Nickel sulfate, bgs., c.l., dlvd	lb.	.28	—
bgs., l.c.l., dlvd.	lb.	.28½	.36
Nicotinamide, USP, 50-kilo., dms., 100 kilos., dlvd	kilo.	5.75	6.50
dms., less than 100 kilos, dlvd.	kilo.	6.60	7.00
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld	lb.	1.20	—
40%, manufacturers, 500-lb. dms., frt. alld	lb.	1.05	—
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, bgs.	lb.	.10¼	—
Nikethamide, cbys.	lb.	5.00	—
Nitric acid, 36° Be., cbys., c.l., works E	100 lbs.	5.75	—
cbys., l.c.l., works E	100 lbs.	6.05	6.85
38° Be., cbys., c.l., works E.	100 lbs.	6.25	—
cbys., l.c.l., works E	100 lbs.	6.55	7.35
40° Be., cbys., c.l., works E.	100 lbs.	6.75	—
cbys., l.c.l., works E	100 lbs.	7.05	7.85
42° Be., cbys., c.l., works E.	100 lbs.	7.25	—
cbys., l.c.l., works E	100 lbs.	7.55	8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis	100 lbs.	3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis	100 lbs.	4.90	—
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works	lb.	.18½	—
cbys. extra, l.c.l. works.	lb.	.20	—
5-pint bots., extra, cs., c.l., same basis	lb.	.22½	—
5-pint bots., extra, cs., l.c.l., same basis	lb.	.24	.25
dms., frt. alld	lb.	.99	—
m-Nitroaniline, cryst., dms., frt. alld	lb.	1.15	—
Paste, dms., frt. alld., 100% basis.	lb.	1.10	—
o-Nitroaniline, flaked, dms., t.l., frt. alld	lb.	.49	—
dms., t.t.l., frt. alld.	lb.	.51	—
o-Nitroaniline orange toner, kgs.	lb	1.35	—
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., dlvd.	lb.	.44½	—
dms., t.c.l., same basis	lb.	.46½	—
o-Nitroanisole, tech., tanks, frt alld.	lb.	.36	—
p-Nitroanisole, tech., solid, dms., frt. alld	lb.	.72	—
Nitrobenzene, dbl dist., dms., c.l., frt. alld	lb.	.13	—
dms., t.c.l., frt. alld.	lb.	.14	—
tanks, frt. alld.	lb.	.11	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.63	—
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works	lb.	.64	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works	lb.	.37½	—
bbls., l.c.l., same basis	lb.	.33½	.40¼
18-20, cps., bbls., c.l., same basis	lb.	.39½	—
bbls., l.c.l., same basis	lb.	.40½	.42½
250-400, 600-1,000 seconds, bbls., l.c.l., same basis	lb.	.43	.46
Nitrocellulose, spirit soluble 30-35 cps. ¼, ½ seconds, bbls., c.l., same basis	lb.	.43	—
bbls., l.c.l., same basis	lb	.44	.46
5-6 cps., 40-60 seconds, bbls., c.l., same basis	lb.	.42	—
bbls. l.c.l., same basis	lb	.43	.45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable			
o-Nitrochlorobenzene dms. c.l., frt. alld	lb	.15	—
dms., l.c.l., same basis	lb	.16	—
tanks, same basis	lb	.13	—
p-Nitrochlorobenzene dms.	lb.	.26	.27
2-Nitro-p-cresol, tech., dms., dlvd	lb	.88	—
Nitroethane, dms., c.l., dlvd. E	lb.	.25	—
dms., l.c.l., dlvd E	lb.	.26½	—
tanks, dlvd E.	lb.	.22½	—
Nitroethane prices West of Rockies are 1c. higher.			
Nitrogen solutions, tanks, f.o.b. works.	ton.	164.00	—

METHYL ETHYL KETONE— A solvent used in the manufacture of many lacquers which provide durable surface coatings for fine furniture. Of high purity and low water-content, it can provide maximum solvent power at low cost.

DICYCLOPENTADIENE — Used as an extender for drying oils in varnish manufacture, it reduces the cost of the finished product. As a modifier for semi-drying oils, it upgrades them by approaching drying oils in reaction and drying time.



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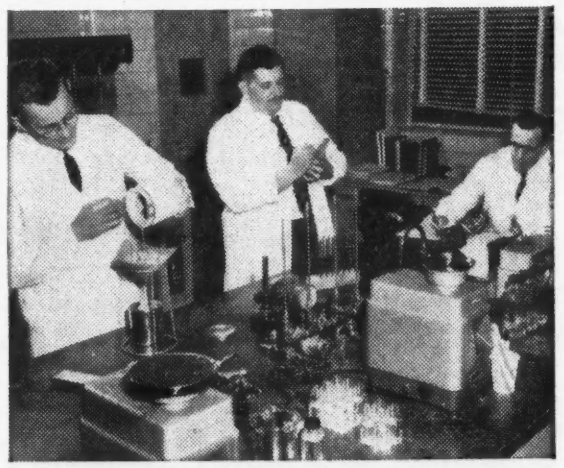

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ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY

ENJAY PETROCHEMICALS

Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Cyls., t.l., min 5 tons, same basis lb. .07½- —
Cyls., l.c.l., t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton 4.50 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago works unit-ton. 3.35 - —
Nitromethane dms. t.l., divd. E lb .25 - —
dms. t.l.t. divd E lb. 26½ - —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., trt. alld. lb .45 - —
dms., t.c.l., frt. alld lb. .47 - —
1-Nitropropane, dms. c.l., frt. alld. E. of Rockies lb. 23½- —
dms., t.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane dms., c.l., trt. alld. E of Rockies lb .18½- —
dms., t.c.l., same basis lb. .20 - —
tanks, same basis lb .16 - —
Nitropropane prices West of Rockies are 1c. per lb higher
m-Nitrotoluene tech. dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 - —
dms. t.c.l., frt alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms. t.c.l. works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms. t.c.l., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l, frt. alld. lb. .22½- —
dms., t.c.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .20 - —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East indian, whole, bgs. lb. 1.35 - —
West Indian, bgs. lb. 1.26 - 1.28
Nutmeg oil USP dist., East indian, cns lb 9.00 -12.60
West indian, cns. lb 9.00 -12.00
Nux vomica, bls. lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .45 - .48
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., t.c.l., divd. Zone 1—lb. .45½- —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., t.c.l., same basis lb. .55 - —
Octylphenol, bgs., c.l., works lb. .22½- —
bgs., t.c.l., works lb. .23 - —
tanks, works lb .21½- —
Octylphenol in dms., 11c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .15¾- .16¾
tanks lb. .13¾- .14
Oleic acid, dbl.-dist. (white), dms. lb. 17 - .19½
tanks lb. .14½- —
S. D., dms. lb. .16 - .18½
tanks lb. .13½- —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 .20
Tears, cs. lb. .22 .30
Olibanum oil, bots. lb. 5.00 7.65
Extra fine, bots lb. 8.00 9.50
Olive oil, edible, dms., spot, duty paid gal. 2.25 - 2.30
Olivine, crude, works ton 12.00 - —
20 mesh, works ton.15.00 - —
100 mesh works ton.20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz.19.20 - —
gran., cns., 50 lbs., same basis oz.21.65 - —
powd., cns., 50 lbs., same basis oz.21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms lb. .60 - —
Florida, cns., dms lb. .0 - .45
Messina, cns. lb. 3.25 5.00
West Indian, bitter, cns., dms. lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet lb .28 .30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns. lb. 1.80 2.30
Orris root, Florentine, bls. lb .55 - —
powd., bbls., bxs. lb. 65 - —
Verona, bls lb. .35 - —
powd., bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram 3.00 4.00
Ouricury wax, crude, bgs. lb. .54 - .55
Refd., pure, bgs. lb. .60 - .62
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb. higher.
b-Oxynaphthoic acid, pigment manufacture, dms., frt alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms. lb. .1400- .1500
tanks lb. .11¼- —
Palm oil acid, double dist., dms. lb. .15¼- .17¾
single dist., dms lb .14¾- .17¼
tanks lb. .12¼- —
Palmarosa oil, cns. lb. 4.90 - 6.00
Papain, powd., bots. lb. 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz 7.10 - 7.35
Paprika, Bulgarian, bgs. lb. .27 - —
Hungarian, bgs. lb .29 - —
Spanish, bgs. lb. .30 - —
Yugoslavian, bgs. lb. .29 - .30
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb 1.21 —
Chlorinated, kgs. lb. 1.36 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
Paraffin, fully refd., 132°-134°F., ASTM, tanks, refy lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde, 91% flake, bgs., c.l., frt alld lb. .10 - —
bgs., t.c.l., frt alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., t.c.l., ex whse lb. .1865- —
USP-X, fib dms., c.l. lb. .19 - —
fib dms., 1,000-lb. lots lb. .20 - —
fib dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd lb. .14 - —
55-gal. dms., t.c.l., divd lb. .15 - —
tanks, divd. lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion ethyl, dms., frt. alld lb. .84 —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Passion flower herb, bls. lb. .35 - .40
Patchouli oil, imp., cns. lb. 5.60 6.50
Peach kernel oil USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., divd E of Rockies lb. 1.00 —
Peacock blue price 1c. higher W of Rockies.
Peanut meal, old process, 45% bgs., f.o.b. mills ton.56.50 - —
solvent, same basis ton.54.00 Nom.
Peanut oil crude, tanks, f.o.b. mills lb. .13½- —
Refd., dms. lb. .18¾- .19
tanks lb. .16¾- —
Pecan dom., NF, citrus, powd. bbls. lb. 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, bbls lb. 1.28 - —
Imp. Danish, bbls. ex whse lb. 1.28 - —
Pelargonic acid, dms., c.l., divd lb. .25 - —
ton lots, same basis lb. .27½- —
tanks, same basis lb. .23½- —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .019 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .021 - —
Pennyroyal oil, USP, imported, cns. lb. 1.95 - 2.70
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., t.c.l., same basis lb. .22½- .29
Pentachlorophenol in dms. 1c, higher.
Pentaerythritol, tech., bgs., c.l., divd lb. .31 - —
bgs., t.c.l., divd. lb. .32 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 - —
Pepper, black, Malabar, bgs. lb. .56 - —
Lampong, bgs. lb. .54 - —
Red, Funtuas, bgs. lb. .32 - —
Japanese, Hontoka, bgs. lb. .37½- —
Santaka, bgs. lb. .31½- —
Sudanese, bgs. lb. .36 - —
White, Muntok, bgs lb. .77 - —
Peppermint leaves, dom., USP, bls., dms lb. .70 - .75
Imp., USP, bls. lb. .85 - —
Peppermint oil, nat., dms. lb. 5.00 - 5.50
Redist., USP, dms lb. 5.50 - —
Perchloroethylene, dms., c.l., or t.l., divd lb. .13½- —
dms., t.c.l., divd. lb. .15¼- —
tanks, divd. lb. .11¾- —
tanktruck, 1,000 gal. min. divd lb. .12¼- —
Peri acid, dry bbls., frt. alld lb. 1.60 - —
Paste, bbls., frt. alld lb. 1.55 - —
Peru balsam, dms. lb. 1.10 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.40 - —
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., t.c.l., divd. lb. .10125-.11375
tanks, refy. lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., t.c.l., divd. lb. 09125-.10375
tanks, refy. lb. 04875- —
Petrolatum, lily white, dms., c.l., refy lb. .08625- —
dms., t.c.l., divd. lb. .10625- .12
tanks, refy. lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., t.c.l., divd lb. .11125- 125
tanks, refy. lb. .06875- —
Petrolatum, USP, soft yellow, dms., c.l., refy lb. .07125- —
dms., t.c.l., divd. lb. .095 - .10375
tanks, refy. lb. 04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l., works. lb. .16½- .18¾
non-ret. dms., t.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., t.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb .91 - —
dms., t.c.l., same basis lb. 93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms. same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies lb. .16¾- —
non-ret. dms., t.c.l., same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. .16½- —
non-ret dms., t.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
30°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
Phenol, 30°C., or above, tar dist., non-ret. dms., t.c.l., same basis lb .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis lo. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb. 1.35 - —
Phenothiazine drench, fib. dms., t.l., divd lb. .44 - —
fib. dms., t.t.l., same basis lb .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms., t.t.l. same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50%, bots lb. 2.15 - 2.35
100%, bots. lb. 3.80 - 4.00
Phenylacetic acid, pure, cryst., cns lb. 1.25 1.75
dl-Phenylalanine, dms., works lb. 27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, divd. E lb. 3.45 - —
fib dms., smaller lots, divd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., divd. E lb. .41 - —
dms., t.c.l., divd. E. lb. .42½- —
tanks, divd E lb. .38½- —
m-Phenylenediamine, dms., c.l., t.l., frt. alld lb. 1.08 - —
t.c.l., t.t.l., same basis lb. 1.10 - —
o-Phenylenediamine, comi, fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., t.c.l., same basis lb. .77 - —
Phenylethyl acetate, bots. lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 1.50
Standard, dms f.o.b. works lb. 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 - —
dms. smaller lots, frt alld lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, divd E. 1.80 - —
fib. dms., smaller lots, divd E lb. 2.10 - —
o-Phenylphenol, dms., t.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., t.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 - .24
Phloroglucinol, comi., fib dms., works lb 6.40 - —
CP, bots., works lb.17 75 - —
Tech., fib dms., works lb.10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ref. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton.46.50 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 4.909 - 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 - 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 - 6.438
74-75%, b.p.l., bulk, c.l., same basis short-ton. 7.329 - 7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton. 8.219 - 8.228
Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64.
Phosphoric acid, food grade, 75%, cbys. c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., t.c.l., same basis 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald 100 lbs. 7.85 —
cbys., t.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF 85%, cbys., c.l., works. 100 lbs. 8.50 - —
cbys., t.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
dms., t.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., t.c.l., works lb. .14½- .15¼
Solid, dms., c.l., works lb. .11½- —
dms., t.c.l., works lb. .12½- .13¼
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., t.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - .40
dms., t.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .19 .23
bgs., t.c.l., same basis lb. .20 .24
tanks, same basis lb. .18½- .22½
Phthalimide 97-98%, dms., frt. alld lb. .65 —
Phthalocyanine blue, full strength, bbls., divd. E. of Rockies. lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 - —
Water dispersable, bbls. lb. 1.71 —
Phthalocyanine green prices 1c. higher W. of Rockies
Phthalylsulfacetamide, fib. dms., 1-000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline, dms. c.l., works, frt. equald lb. .46 - .48
dms., t.c.l., works, frt. equald lb. .46½- .49
tanks, same basis lb. .43 - .46
b-Picoline, 98% dms., t.l., works. lb. 1.05 - —
dms., t.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C. dms., c.l., works. lb. .32½- —
dms., t.c.l., works lb. .33 - —
g-Picoline, dms., t.o.b., works lb. 1.60 - —
tanks, t.l., same basis lb. 1.50 - —
Picric acid, NF bbls. lb. .85 - —
Tech., bbls lb. .44 - —
Pigment green B, kgs. lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Pilocarpine nitrate, USP, bots., vials. oz. 5.15 - —
Pimento, Jamaican, bgs. lb. .68½- —
Mexican, bgs lb. .56 - —
Pimento berry oil NF dms. lb 3.75 - 9.25
Pimento leaf oil, crude, cns. lb. 2.40 - 2.60
Pine oil, dest.-dist dms., t.c.l., works lb. .15 —
dms., t.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd lb. .188 —
Pineneedle oil, Siberian (see Abies Siberoca oil).
Pink root, bls. lb. 2.25 - —
Piperazine, anhyd., dms., c.l., frt. alld lb 1.80 - —
dms., t.c.l., same basis lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs or more, frt. alld lb. .1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld lb. .89 - —
Piperazine phosphate, 42%, dms., 1,000 lbs or more, frt. alld lb. 1.06 - —
Piperidine, dist., 98% min., dms., c.l., t.l., frt. equald lb 2.55 - —
Piperonyl butoxide, dms., divd. E.lb. 4.50 5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works oz.81.00 -85.00
Pleurisy root, bls. lb. 45 .50
Podophyllum resin, NF, dms. lb.12.50 - —
Poke root, bls. lb. .19 - .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .25 - —
Nubs, bgs. lb. .37 .40
Poppy seed, Argentine, bgs. lb. No stocks.
Dutch, bgs. lb. .16 - —
Danish, bgs. lb. .15 - —
Polish, bgs. lb. .16 - —
Turkish, bgs. lb. .12 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., t.c.l., same basis 100 lbs. 5.25 - —
tanks, same basis 100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.55 - —
reg., flake, 88-92%, dms., t.c.l. same basis 100 lbs.11.05 - —
solid, 88-92%, dms., c.l., works 100 lbs. 9.10 - —
dms., t.c.l., works 100 lbs.10.60 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
powd., dms lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., t.c.l., works lb. .18¼- .19¼
Potassium bichromate in dms. ¾c. higher.

Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis lb. .38 - —
100-lb. bgs., smaller lots, same basis lb. .40 - —

Potassium borohydride, powd., dms., works lb.16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots.

Potassium bromate, 200-lb. dms., c.l., frt. alld lb. .49 - —

Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40

Potassium carbonate, dom., NF, gran., bbls., dms lb. .20 - —
Dom. tech., powd., bbls., dms lb. .21 - .22
Dom., calcinated, bgs., c.l., works. 100 lbs. 8.50 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs. 8.15 - —

Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., l.c.l., works lb. .13½- .14½
Powd., dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15

Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾- —
NF, gran., 25-lb metal dms lb. .36 - —
NF powd., dms., 2,000 lbs. or more, works lb. .17¼- —

Potassium chloride, indust., 99.9% KCL, bulk, c.l., works ton 29.00 - —
bgs., c.l., works ton.34.00 - —
99.3% KCL, bulk, c.l., works ton.28.00 - —
bgs., c.l., works lb.33.00 - —
USP cryst. dms. lb .20 - .22
USP gran., dms. lb. .21 - .23
USP powd., dms. lb. .24 - .26

Potassium chloride agricultural (see Potassium muriate).

Potassium chromate, tech., dms., works lb. .50 - .51

Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd., 250-lb dms., same basis. lb. .46 - —

Potassium cyanide, dms., 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000 19,999-lb. lots, works, lb. .43 - —
dms., smaller lots, works lb. .44 - .44½

Potassium dichromate (see Potassium bichromate).

Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —

Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots lb. .29 - —

Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib dms., l.c.l., works lb. .31 - —

Potassium fluoride, dms., works lb. .36 - .37

Potassium gluconate, 100-lb. dm., f.o.b. works E lb. 1.67 - —

Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30

Potassium hydroxide, tech. (see Potash caustic).

Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots lb .33½- .38

Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —

Potassium iodide, USP cryst., gran., dms., 500-lb., f.o.b. works. lp. 1.55 - —

Potassium manure salt, min. 20% K_2O, bulk, c.l., works. unit-ton. .17 - .1765

Potassium metabisulfite, gran. dms., lb. .16 - —
Powd., dms lb. .27 - —

Potassium muriate, standard, bulk, c.l., works unit-ton. .35 - .37
bagged 60% minimum K_2O, same basis ton.26.00 -27.20
Gran., bulk, c.l., works unit-ton. .36 - .38
bagged, 60% minimum K_2O, same basis ton.26.60 -27.80

Inside prices apply to material contracted for prior to July 1, 1960.

Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.17.00 - —
bbls., smaller lots 100 lbs.18.00 -19.00
gran., bgs., 20-ton lots 100 lbs. 9.50 - —
bgs., smaller lots 100 lbs.11.00 -12.00
powd., bgs., 20-ton lots 100 lbs.10.50 - —
bgs., smaller lots 100 lbs.12.00 -13.00

Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 - —

Potassium pentaborate, gran., dms., c.l., works ton.219.50 - —
dms., ton lots, ex whse ton.311.00 - —
dms., smaller lots, ex whse ton.316.00 - —
Powdered potassium pentaborate $10 per ton higher.

Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 - .20

Potassium permanganate, coml., kgs., works lb. .25 - .33
USP, dms., works lb. .29 - .35

Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 - .21

Potassium pyrophosphate, tetrabasic, dms., works lb. .1475- .1575

Potassium prussiate red (see Potassium ferrocyanide).

Potassium prussiate yellow (see Potassium ferro-cyanide).

Potassium silicate, electrical grade, 30° Be, 1.2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —

Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 6.70 - —
tanks, works 100 lbs. 5.60 - —

Potassium silicate, glass grade, bgs., c.l., works 100 lbs.17.30 -18.00
bgs., l.c.l., works 100 lbs.17.80 - —

Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —

Potassium silicofluoride, bgs., works. lb. .09½- .10

Potassium silicofluoride in drums, 0.4c. per lb. higher.

Potassium stannate, dms., frt. alld. E lb. .789 - .861

Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., works unit-ton. .67½- .69½

Inside price applies to tonnage contracted for prior to July 1, 1960.

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium sulfate, NF VII, cryst., dms., lb. .31 - .32
NF VII, gran., 400-lb. dm. lb. .18 - —
NF VII, powd., 400-lb. dm. lb. .17 - —

Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).

Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79

Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —

Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price. ton.13.45 - —
bulk, works, July forward ton.14.00 - —

Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., works E lb. .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —

Potassium-titanium fluoride, fib. dms., works lb. .39 - .40

Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works lb. .52½- .55

Pregnenolone, bots. gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld lb. 2.25 - —
USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb. 2.40 - —
dms., 500 lbs lb. 2.45 - —
dms., 100 lbs lb. 2.50 - —
Progesterone, USP, bots gram. No prices.
Pregnenolone acetate, bots gram. No prices.
Propenyl guaethol, dms. lb.24.30 -27.00

b-Propriolactone, tech., dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., l.t.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —

Propionic acid, syn., pure, dms., c.l., divd lb. .23¼- —
dms., l.c.l., divd. lb. .24¾- —
tanks, divd. lb. .20¾- —

n-Propyl acetate, dms., c.l., divd. lb. .14¾- —
dms., l.c.l., divd lb. .16¼- —
tanks, divd. lb. .12¼- —

n-Propyl alcohol, dms., c.l., divd lb. .14 - .15
dms., l.c.l., divd lb. .15½- .16½
tanks, divd. lb. .11½- .12½

n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40

n-Propyl-p-hydroxbenzoate, USP, dms lb. 2.30 - 2.40

Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots kilo.55.10 -55.30

n-Propylamine, dms., c.l., divd lb. 1.24 - —
dms., l.c.l., same basis lb. 1.255 - —

n-Propylene dichloride, consumers', dms., c.l., divd. E lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis.

Propylene glycol, indust., dms., c.l., divd. E lb. .15 - —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP, dms., c.l., divd. E lb. .17 - —
dms., l.c.l., same basis lb. .18¾- —

Propylene glycol methyl ether, dms., c.l., divd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —

Propylene oxide, dms., c.l., divd. E. lb. .17 - —
dms., l.c.l., divd. E lb. .18½- —
tanks, divd. E lb. .14½- —

Psyllium seed, black, bgs lb. .30 - .35
Blonde, bgs. lb. .18 - .20
Husks, bgs. lb. .42 - .45

Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03⅞- —

Imp., Italian, silk-screen, coarse, bgs, ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs. ton.60.00 - —
fine, bgs. ton.60.00 -70.00

Pumpkin seed, bgs lb. .25 - .26

Pyrethrins, syn. (see Allethrin).

Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —

Pyrethrum liquid, 20:1 basis (2 grams pyrethrins per 100cc odorless base), dms., works. gal. 9.60 - 9.80

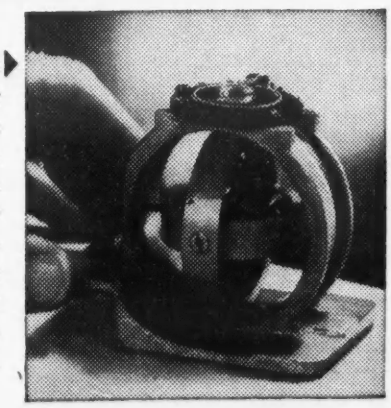
Pyrethrum liquid, 100:1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 -46.90

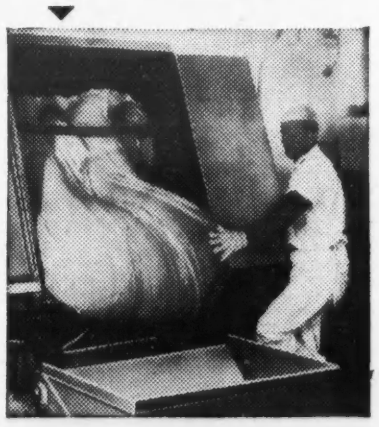
HOW *HERCULES* HELPS...

PACKAGE BEAUTY—For a merchandising *plus* in its new line of children's cosmetics, Avon turned to Hi-Fax,® Hercules high-density polyethylene. Hi-fax pioneered the break-through for plastic detergent bottles and is now finding increasing use in household chemical, drug and cosmetic packaging. The first material approved by both producers and users of plastic containers, Hi-fax continues to lead the way.

CHEWING GUM—This enormous mass is undoubtedly the largest wad you will ever see. Here it is being given added "chewability" through the use of a masticatory substance such as Staybelite Ester® 5, which is exempt from the Food Additive Amendment for chewing gum use. Other Hercules ingredients that are useful in this $187,000,000 industry as masticatory substances are Ester Gum 8D, Poly-pale® Ester 10, and Hercolyn® D.

SOLVE INTRICATE PROBLEMS—Tiny propellant charges for Giannini "Pyrogyro" provided a practical solution to the problem of smaller, lighter, more effective and less expensive gyroscopes for missile applications. Gases generated by the precision propellant charge bring the gyro rotor up to speeds greater than 36,000 revolutions per minute within 0.1 second after ignition.





HERCULES POWDER COMPANY
INCORPORATED
Hercules Tower, 910 Market Street, Wilmington 99, Delaware

CHEMICAL MATERIALS FOR INDUSTRY

860-10

HERCULES

Pyrethrum oleoresin, dewaxed, 20%. dms., works lb 11.00 -11.35
purif. 20%, dms., works lb 11.00 11.35
Pyridine denat. dms. c.i. works and frt. equald gal. 2.77 - —
dms., l.c.l., same basis gal. 2.80 - —
Refd., 2°, non-ret. dms., c.l., same basis lb .69½- —
dms., l.c.l., same basis lb .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride, USP 500-gram bots., dms., f.o.b works kilo 95.00 -100.00
Pyrites, Canadian 48-50% S, mines, long-ton. 4.50 - 5.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100 lbs., f.o.b., works lb 3.50 - —
Pyrogallol, NF, 100-lb. dms lb 3.50 - —
Pyroxylin, USP, bots lb 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.75 - —
Quinidine sulfate, USP, 1,000-oz. dm oz. .74½ —
Quinine, NF, 1,000-oz. dm oz. .3105- —
Quinine bisulfate, USP, 1,000-oz dm. oz. .2330- —
Quinine hydrochloride, 1,000 oz dm. oz. .3030- —
Quinine sulfate, USP, 1,000 oz dm. oz. .2575- —
Quinoline, dms., c.l., frt. equald lb .50¾ — —
dms., l.c.l., same basis lb .51¼- —
tanks, same basis lb. .50 - —

R

R salt paste, dms., frt. alld., 100% basis lb .98 - —
Powd., frt. alld, 100% basis lb. 1.08 - —
Rapeseed oil, dms lb. .15¼- .15½
tanks lb. .13¼- —
Rare earth oxalate, NF, 45-50%, bgs., works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS

Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Red toner, Lake C, alizanine bbls., works lb 1.25 - —
Reserpine, cryst., bots gram 1.25 - —
Resorcinol, tech. grade, bgs., c.l., works, frt. equald lb. 77½- —
bgs., l.c.l., same basis lb. .78½- —
Resorcinol in dms., 1c per lb. more.
USP, powd., dms., works lb 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb 6.00 - —
Tungstated, PTMA works, kgs lb 6.60 - —
Rhodinol, 5-lb cans lb.42.00 -51.00
Synthetic lb.14.00 -16.00
Rhubarb root, India, whole, bgs lb. .25 - —
powd., bgs lb. .35 - —
tanks, same basis lb. .14½- —
Riboflavin, USP fib dms., kilo or more, dlvd kilo.36.00 - —
Riboflavin, 5-phosphate-sodium fib dms, kilo or more, dlvd kilo.104.50 - —
Rice bran oil, clarified, dms., t.c.l. lb. .14 - .14½
tanks, dlvd E lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots lb 1,152.00- —
Turkish, bots lb.560.00 750.00
Rosemary oil, Spanish, NF, cns., dms lb. .97 1.40
Spanish, tech., cns., dms lb. .50 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works unit-lb. .10½- —
Resin, 25-45% fib dms., works, unit-lb. .10½- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875 — —
Houston, Texas gal. .155 — —
Rue oil, bots lb 2.75 3.00
Rutin, NF, fib dms., 10 kilo lots kilo.13.00 - —
fib dms., 5 kilo lots kilo.13.50 - —
fib dms., 1 kilo kilo.14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime bbls lb. .42 - .44
Saccharin, calcium, fib dms., 1,000-lb lots, works lb 2.50 - —
USP, gran., soluble, dms., 1,000-lb lots lb 1.40 - —
dms., smaller lots lb 1.50 - —
USP powd., soluble insoluble, dms., 1,000-lb lots lb 1.45 - —
dms., smaller lots lb. 1.55 - —
Saccharin, USP, powd, insoluble, dms., 1,000-lb lots lb 1.43 - —
dms., smaller lots lb 1.53 — —
Safflower oil, dms., New York lb. .1725- .1750
tanks, Atl. Coast lb .15¼- 15½
Saffron, Mancha Superior, tins lb.19.50 - —
Safrol, dms lb .65 - —
Sage, Dalmatian, bgs lb .40 - —
Greek, cns lb .15 - —
Italian, cns lb .18 - —
Sage oil, clary, bots lb.15.50 -18.00
Dalmatian, cns lb 2.85 3.25
Spanish, cns lb 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb 1.23 - —
dms., l.c.l., same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid, tech., fib dms., c.l., t.l., dlvd lb. .40½ — —
fib dms, l.c.l., dlvd lb. .44¾ — —
Salicylic acid, USP, cryst, 200-lb. fib. dms., 1,000 lbs or more lb. .51¾ — —
200-lb fib dms., less than 1,000 lbs lb. .54¾ — —
100-lb. fib dms, 1,000 lbs or more lb. .53¾ — —
100-lb. fib dms, less than 1,000 lbs lb. .56¾ — —
USP, powd., 100-lb fib dms., 1,000 lbs. or more lb. .58¾ — —
100-lb. fib dms., less than 1,000 lbs lb. .61¾ — —
Salol, NF, gran., bbls., kgs lb 1.20 — —
Powdered salol, 25c per lb higher.
Salt, rock, paper bgs., c.l. 100 lbs 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l 100 lbs. 1.34 - —
Saltcake, dom. bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs., lb. .55 - .60
powd, fib dms lb. .75 - .78
Sandalwood oil, cns lb.21.00 - —
Sarcosine, tech., tanks, f.o.b., works, frt equald lb 1.03 — —
lb No stocks.
Sassafras oil, artif., dms lb. .45 — —
Nat., dom., dms lb 1.40 - —
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Powd, bgs., frt alld, 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz.13.00 - —
Sebacic acid, CP bgs., c.l., works. lb. .69½- —
bgs., l.c.l., works lb. .71½- —
Purified, bgs., c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture, fib dms, 5,000-lb. lots lb. .30½ — —
fib dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls lb. 3.00 - —
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Tinnevelly, No. 1, bls lb. .22 - —
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls lb. .28 - —
powd., bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 6.50 - —
Sesame oil, USP, dms lb. .38 - .39
Sesame seed, Colombian, bgs lb. .15½- —
Lebanese, hulled, bgs lb. .19 - —
Nicaraguan, hulled, bgs lb. .25 - —
nat., bgs. lb. .14 - —
Salvadorian, Nat. bgs lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .47 - —
dms., l.c.l., works lb. .22 - .20¼
bbls., 1,500-lb. lots lb. .46 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c. per lb. higher for all packages.
Shellac, bleached, refd. bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10-bg. lots, lb. .34 - .37
superfine, bgs., 10-bg. lots lb. .32 - .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18¼
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 - —
bgs., l.c.l., works, ex whse. ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 - —
bgs., l.c.l., works ton.25.00 - —
99½%, 140 mesh, bgs., c.l., works ton.15.00 - —
bgs., l.c.l. works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .20 - —
tanks, works lb. .15 - —
Silver bullion, ingots, cs Troy oz. .91⅛- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots., 250-500 oz., same basis. oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 - —
Snakeroot oil, Canada, cns lb.40.00 - 43.00
Soapbark, crushed, bls lb .30 - .35
Powd., bls lb .35 - .40
Whole, bls lb .20 - .25

By every standard... WEST END MEASURES UP AS THE QUALIFIED SUPPLIER OF SALT CAKE

- ACCURATE PROCESSING OF ORDERS
- UNIFORMLY HIGH QUALITY
- ABUNDANT STORAGE
- FLEXIBLE AND EFFICIENT LOADING AND SHIPPING
- EXTENSIVE PRODUCTION CAPACITY
- VAST NATURAL SOURCE OF RAW MATERIAL
- ALL COMMITMENTS SCRUPULOUSLY MET
- FRIENDLY, HELPFUL ATTENTION TO INDIVIDUAL NEEDS
- PROMPT, AUTHORITATIVE ANSWER TO EVERY INQUIRY

However you view your needs, you will find in West End a unique coordination of specialized services, extensive production facilities and product excellence essential to the prompt, efficient handling of individual requirements.

Prompt, authoritative answer to every inquiry

When you phone an order or request information, the San Francisco Sales Office can consult the plant immediately by private wire teletype on product availability, packaging, transport facilities, dates and car numbers, detailed product specifications, development of products to meet new applications or specifications. An answer or firm commitment is given immediately. It is relayed to you often while you are still on the phone.

Stauffer CHEMICALS SINCE 1885 — 75 YEARS OF SERVICE TO INDUSTRY AND AGRICULTURE

WEST END CHEMICAL COMPANY • DIVISION OF STAUFFER CHEMICAL COMPANY
636 CALIFORNIA, SAN FRANCISCO 8, CALIF. • PLANT: WESTEND, CALIF.

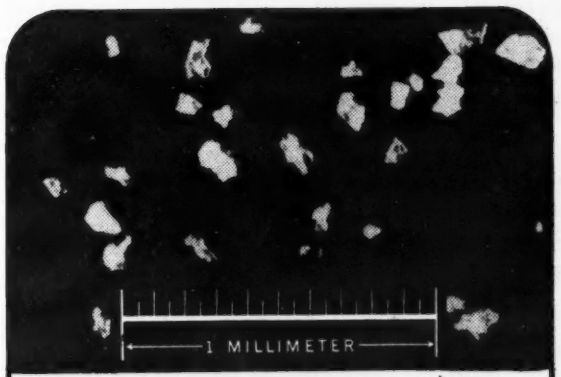
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 • —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 • 4.77
bulk, c.l., works .... 100 lbs. 1.60 • —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 • —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 • 4.72
bulk, c.l., works..... 100 lbs. 1.55 • —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 • —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 • —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 • 3.00
Soda, caustic, liq, 73%, sellers' tanks, works, dry basis, 100 lbs. 3.00 • —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 • 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 • —
Soda, sal, conc., bgs., c.l., works, 100 lbs. 2.50 • —
bgs., smaller lots, works 100 lbs. 2.80 • —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60%, gran., dms., c.l., works, lb. .15½- —
dms., l.c.l., works ..... lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 • —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 1.90 • —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E..... lb. .29 • —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm., less than ton lots, f.o.b. works lb. .24 • —
ton lots or more, same basis, lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb. dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis.... lb. .19 • —
100-500 dms., same basis..... lb. .20 • —
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 6.80 • —
less than 100-kilos ..... kilo. 7.05 • —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 • —
dms., l.c.l., same basis .... lb. .39 • —
USP, dms., c.l., t.l., frt. alld lb. .38 • —
dms., ton lots, same basis.... lb. .43 • —
dms., 1,000-lb. lots, same basis, lb. .45 • —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 • —
bgs., l.c.l., works .... 100 lbs. 3.85 • —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 • —
bgs., l.c.l., works..... 100 lbs. 3.45 • —
Sodium bichromate, gran., ogs., c.l., t.l., works lb. .13 • —
bgs., l.c.l., works..... lb. .13½- .14¾
Sodium bichromate in dms. ¾c. per lb. higher.
Sodium bifluoride, bbls., c.l., works, frt. equaid lb. .19½- —
bbls., l.c.l., same basis ..... lb. .2025- —
Sodium bisulfate, bulk, c.l., works, 100 lbs. 2.00 • —
dms., c.l., frt. equald ..... 100 lbs. 3.00 • 3.60
dms., l.c.l., frt equald ... 100 lbs. 3.50 • 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs. 5.00 • —
bgs., l.c.l., works ..... 100 lbs. 5.45 • —
Soln., 35° bbls., c.l., works. 100 lbs. 1.70 • —
bbls., l.c.l., works ..... 100 lbs. 2.20 • —
Sodium borate (see Borax).
Sodium borohydride, powd., dms., c.l., works lb. 19.90 • —
dms., l.c.l., works ..... lb. 33.00 -40.00
Sodium borohydride, stabilized water soln., 12% NaBH, 100% basis, dms., works lb. 15.00 • —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb. lots.
Sodium bromide, USP, gran., dms., works lb. .40 • —
Sodium carbonate, cryst., monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 • —
bgs., l.c.l., works ..... 100 lbs. 3.50 • —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 • —
dms., l.c.l., works..... lb. .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 • —
Sodium chlorite, tech., dms., c.l., works lb. .58 • —
dms., 20-dm. lots or more, works, lb. .66 • —
dms., smaller lots, works lb. .70 • .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 • —
dms., l.c.l., works ..... lb. .28 • —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb. .14¾- —
fib. dms., l.c.l., works .... lb. .15¼- .16½
Sodium chromate tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., l.c.l. ..... lb. .1065- .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E lb. .62 • —
NF VIII, gran, bgs., c.l., same basis lb. .26 • —
USP XIV, gran., bgs., c.l., same basis lb. .29 • —
Sodium citrate, USP, powd. prices ½c. higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 • —
dms., smaller lots, works .... lb. .90 • 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb. lots lb. .176 • —
dms., same basis, 5,000 to 19,999-lb. lots lb. .188 • —
dms., same basis, 1,000 to 4,900-lb. lots lb. .198 • —
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 • —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 • —
250-lb dms., l.c.l., works lb. .18¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 • —
250-lb dms., l.c.l., works lb. .15¼- —
Sodium dimethyl dithiocarbamate, 40% soln., dms., c.l., t.l., frt. alld., 100% basis lb. .42 • —
dms., l.c.l., t.l., same basis lb. .47 • .53
tanks, same basis ..... lb. .38 • —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs. smaller lots ..... lb. .14¼- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt. equald lb. .1463- —
Sodium formate, bgs., c.l., works, 100 lbs. 7.05 • —
bgs., l.c.l., ex whse..... 100 lbs. 8.65 • —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 • —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .44 • —
Tech., bgs., c.l., t.l., same basis lb. .34 • —

Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 • 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point. lb. 2.20 • —
dms., 50-99 lbs., same basis lb. 1.77 • —
dms., 100-999 lbs., same basis lb. 1.20 • —
dms., 1,000 lbs or more, same basis lb. .93 • —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite, dms. c.l., frt. alld lb. 23½- —
dms., l.c.l., frt. alld. ..... lb. .25¾- —
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots, lb. .23½- .25
Sodium hydroxide, tech. (see Soda, caustic).
Sodium hypophosphite, NF, dms. 1,000-lb. lots lb. .99 • —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 2.13 • —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd. ..... lb. .21½- —
tanks, dlvd. ..... lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 • 6.50
t.c.l., bgs., works..... 100 lbs. 4.40 • 7.00
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran., bgs., c.l., works ton. 210.00 • —
bgs., ton lots, ex whse. 100 lbs. 8.00 • —
bgs., smaller lots, ex whse. 100 lbs. 9.23 -11.23
Tetrahydrate, bgs., c.l., works. ton. 210.00 • —
bgs., ton lots, ex whse. 100 lbs. 13.93 • —
bgs., smaller lots, ex whse. 100 lbs. 15.18 -17.18

Sodium, metallic, bricks, c.l., works, lb. .21 • —
Fused, 18,000-lb. lots or more, works lb. .19¼- —
tanks, works ..... lb. .17 • —
Sodium metalinate, bbls., frt. alld. lb. .62 • —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt. 100 lbs. 11.10 • —
bgs., l.c.l., same basis 100 lbs. 11.85 • —
dms., c.l., same basis ..... 100 lbs. 11.70 • —
dms., l.c.l., same basis .... 100 lbs. 12.45 • —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 • —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 6.05 • —
dms., c.l., works..... 100 lbs. 6.20 • —
dms., l.c.l., works ..... 100 lbs. 6.55 • —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 • —
bgs., l.c.l., works..... 100 lbs. 4.80 • 6.75
dms., l.c.l., works..... 100 lbs. 4.95 • —
dms., l.c.l., works..... 100 lbs. 5.30 • 7.25
Sodium molybdate, anhyd., dms., works, frt. equaid lb. .92 • .99
Cryst., dms., works, frt. alld lb. .74 • .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls. ..... lb. .72 • —
Sodium nitrate, dom., crude, bgs., c.l., works ton. 48.00 • —
bulk, c.l., works ..... ton. 44.00 • —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton. 48.00 • —
bulk, c.l., same basis.... ton. 44.00 • —

Sodium nitrite, USP, bbls., c.l., works, frt. equaid 100 lbs 9.00 • —
bbls., l.c.l., same basis 100 lbs. 11.00 • —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs 6.70 • —
dms., l.c.l., works ..... 100 lbs 7.05 • 7.65
Hydrated, flake, bbls., c.l., works. 100 lbs 5.65 • —
bbls., l.c.l., works.... 100 lbs. 7.60 • 7.90
Sodium oxalate, 88%, bgs., works. 100 lbs. 12.35 • —
99%, bgs., works. 100 lbs. 15.40 • —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equaid lb. .26 • —
dms., l.c.l., same basis .... lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 • —
dms., c.l., same basis ..... lb. .27½- .34
Powd., dms., c.l., same basis.... lb. .25 • —
dms., l.c.l., same basis ..... lb. .26½- .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 • —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works ..... lb. .19 • .21
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½- —
dms., l.c.l., same basis ..... lb. .22 • .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 • —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 • .53
NF, powd., dms. ..... lb. .55 • .56

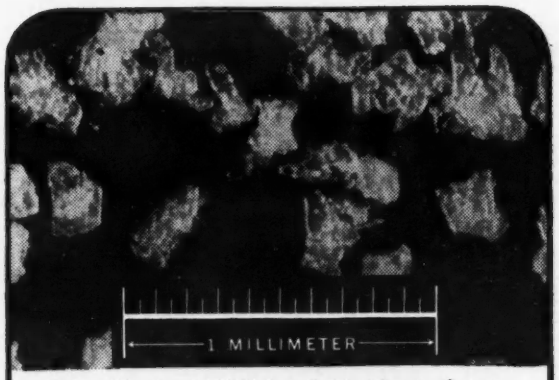
Get Sodium Bicarbonate in the grain size you need every time... FROM CHURCH & DWIGHT



Sodium Bicarbonate U.S.P. Powdered No. 1—For general purpose use in pharmaceuticals, chemical processing, tooth powder, industrial applications.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

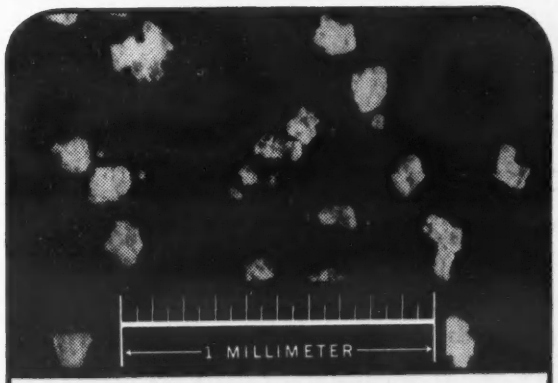
42 Mesh.....Trace	200 Mesh.....35.0%
100 Mesh.....5%	325 Mesh.....70.0%
170 Mesh.....20.0%	400 Mesh.....80.0%



Sodium Bicarbonate U.S.P. Granular No. 5 for manufacture and compounding of effervescent salts, fruit soft drink tablets and other pharmaceuticals.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

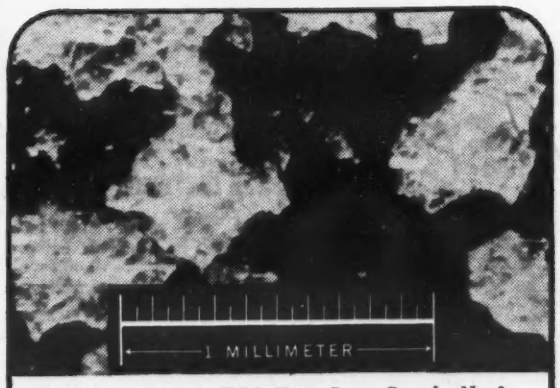
42 Mesh.....Trace	100 Mesh.....92.5%
65 Mesh.....27.0%	170 Mesh.....99.0%
80 Mesh.....66.5%	



Sodium Bicarbonate U.S.P. Granular No. 4 for use in pharmaceuticals, baking powders and cake mixes.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

80 Mesh.....Trace	200 Mesh.....91.0%
100 Mesh.....1.5%	325 Mesh.....98.5%
170 Mesh.....80.5%	



Sodium Bicarbonate U.S.P. Extra Coarse Granular No. 6 for use in formulating special pharmaceuticals.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

28 Mesh.....None	65 Mesh.....91.0%
42 Mesh.....13.0%	80 Mesh.....98.5%
48 Mesh.....33.0%	100 Mesh.....99.3%

Why jeopardize the shelf life or sparkling performance of your pharmaceutical products with an inappropriate granulation of sodium bicarbonate? To eliminate risks, specify Church & Dwight. You'll obtain the widest selection of grain sizes available because Church & Dwight is the country's largest supplier of Sodium Bicarbonate U.S.P. You'll also receive for the asking unmatched technical service based on more than 100 years of experience in the formulating of Sodium Bicarbonate. Unusual grain size requirements are given special attention. Try us and see. Write today for latest technical data sheets.

CHURCH & DWIGHT CO., INC., 70 PINE STREET, NEW YORK 5, N.Y.

Sodium phosphate, dibasic, anhyd., bgs., c.l., frt equald 100 lbs 7.95 - —
bgs. l.c.l. same basis 100 lbs 8.35 - 9.40
Sodium phosphate, dibasic, cryst., bgs., c.l., t.l., frt. equald. 100 lbs. 4.60 - —
bgs. l.c.l., frt equald 100 lbs 5.00 - 5.75
Dibasic duohydrate, bgs., c.l., frt. equald 100 lbs 7.60 - —
bgs., l.c.l., same basis 100 lbs 8.10 - —
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20½
Monobasic, anhyd bgs., c.l., frt. equald 100 lbs 9.00 - —
bgs., l.c.l. same basis 100 lbs 9.40 - 10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., frt. equald 100 lbs 9.45 - 10.05
Sodium phosphate in dms. 60c. to 80c. higher than bgs
Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms., divd E of Rockies, lb. 34½- —
Prices W of Rockies 3c per lb more.
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate acid, bgs., c.l., works, frt equald 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - 12.35

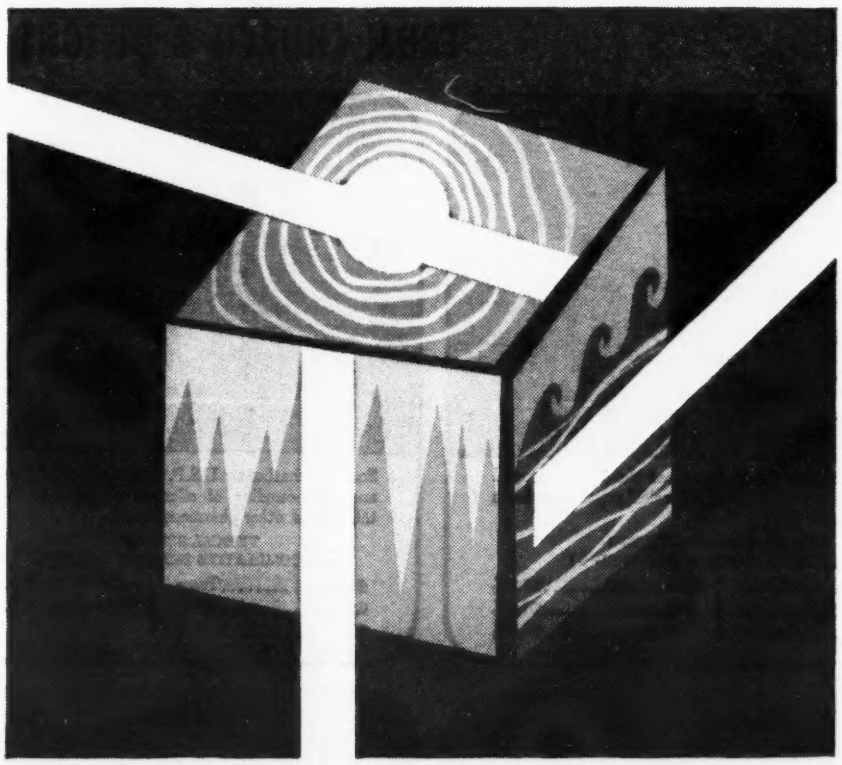
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .38 - —
dms., l.c.l. works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate USP dms., 1,000-lbs or more lb. .78½- —
dms., less than 1,000 lbs., dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
Sodium sesquicarbonate, bgs., l.c.l., divd. zone 1 100 lbs. 4.10 - 4.35
divd. zone 2 100 lbs 4.35 - 4.60
divd. zone 3 100 lbs 4.75 - 4.90
divd zone 4 100 lbs 5.35 - 5.60
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La. and Miss. south of 31°; Tex E. of 100°; S of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; to va (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark. W of 96°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs 5.70 - —
dms. c.l., t.l., works 100 lbs 6.20 - —

Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.30 - —
dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works, 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47° Be. 1:29.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1.3.2, bgs., works ton. 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725- —
Sodium silicofluoride in dms., 0.4c. per lb. higher
Sodium stannate, dms., works, frt. alld., E lb. .648 - .707
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd. bgs., c.l., divd E. ton. 54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton. 36.00 - —
bulk, c.l., works ton. 32.00 - —
USP, cryst., fib dms. lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq. 40-44%, tanks, works, 100% basis ton. 130.00 - —

Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works, 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms. lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate NF, cryst. bbls. lb. .13½- —
Tech., anhyd. 100-lb bgs. c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb bgs. l.c.l., t.l., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb bgs. l.c.l., t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns. c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb dms., c.l., frt alld. E. lb. .35 - —
50-lb dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l., frt alld E lb. .42 —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
bgs., l.c.l., same basis 100 lbs. 8.65 - —
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs 8.95 - —
bgs., l.c.l., works 100 lbs 9.70 - 13.13
dms., c.l., works 100 lbs 9.45 - —
dms., l.c.l., works 100 lbs. 10.20 - 10.60
Sodium tungstate, tech., bgs., divd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., divd lb. .22½- —
dms., l.t.l., same basis lb. .23 - —
Sodium-zirconyl sulfate, fib dms., 1,000-lb lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35¼
Solvent naphtha, petroleum, straight aromatic, 310°-360°F b.r., 14°-16°C m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York, gal. .30 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°-265°F b.r., 31°C. m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C m.a.p., tankcars, New Jersey and New York gal. .275 - —
Solvent naphtha, 319°-380°F. b.r., 27°C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322°-395°F b.r., 28° m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate fib dms., 20,000-lb. lots, works lb. .33½- —
fib. dms., 10,000 to 20,000-lb lots, works lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works lb. .28 - .28
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., comyl., aqueous, dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27 - —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., l.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .29½
Soybean meal, 44% bulk, unrestricted, Decatur ton. 43.00 - —
Soybean oil, crude, tanks, Decatur, lb. .10½- —
Foots, soapstock, acid 95%, tanks, lb. .05¼- —
Refd., alkali, dms. lb. .1443- .1468
tanks lb. .1243- —
Clarified, dms. lb. .1293- .1418
tanks lb. .1193- —
Salad, dms. lb. .1430- .1455
tanks lb. .1230- .1255
Soybean oil acids, dbl. dist., dms., lb. .16 - .18½
tanks lb. .13½- —
S. D., dms. lb. .14¾- .17¼
tanks lb. .12¼- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom., bls lb 75 —
Spearmint oil, NF, dms lb. 7.00 - 7.80
Sperm oil, bleached, winter 45° dms lb. .1675- .1775
tanks lb. .1475- —
Nat., winter 45°, dms lb. .1575- .1675
tanks lb. .1375- —
Spermaceti wax, blocks, cs. lb. .32 - .33
Cakes, cs. lb. .33 - .34
Spruce oil, cns., dms. lb 2.10 3.35
Squill, white, bls. lb. .16 - .18
Powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .817 - .839
Stannic oxide, dms., divd. lb. 1.10 - 1.11
Stannous chloride, anhyd dms., works lb. 1.013 - 1.268
Hydrous, cryst., dms., works lb. .87½- .89½

SILICONE NEWS from Dow Corning

Sticks Here...Here...Here



In Heat, Cold and Moisture Silicone Adhesives Hold!

The exceptional durability of Dow Corning pressure sensitive silicone adhesives makes them dependable for tapes, sealants, spray-on coatings, bonding materials and splicing agents. Perhaps there's a special property you need in an adhesive... or a special *combination* of properties? Here, briefly, are the properties of Dow Corning silicone adhesives. Silicones may offer exactly what you need.

They stick anywhere! At temperatures ranging from —80 to 500 F, pressure sensitive silicone adhesives stay stuck and don't deteriorate. They withstand the effects of moisture, oxidation, corrosive chemicals, weathering, arcing, corona and fungus. For electrical applications, silicone adhesives provide excellent dielectric strength.

As tapes. Dow Corning silicone adhesives are used with most backing materials. Now readily available from several manufacturers are tapes with backings of glass cloth, Teflon, Mylar, aluminum foil, silicone rubber and combinations of these materials. Typical applications include: high temperature electrical insulation; bonding, splicing, and sealing; masking in chemical milling; release surfacing, and electroplating.

Or alone. For a fastening adhesive in rugged service, silicones may be your answer. For example, silicone adhesives in combination with asbestos fibers are used to coat and insulate hot air ducts in aircraft. Other tough applications: sealing ends of heat elements in appliances, bonding mica and asbestos panelboard, and bonding silicone rubber to the coils of electrical equipment.

Dow Corning Silicones may well be your adhesive of the future. For more technical information or assistance, write Dept. 6311a.

Available now — list of manufacturers supplying pressure sensitive tapes with silicone adhesives.

first in silicones

Dow Corning CORPORATION
MIDLAND, MICHIGAN

ATLANTA BOSTON CHICAGO CLEVELAND DALLAS LOS ANGELES NEW YORK WASHINGTON, D. C.

Stannous sulfate, dms., works....lb. 1.067 - 1.067
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. ..... lb. .60 .61
Stearic acid, dbl., pressed, bgs. lb. .15¼- .17¾
Single-pressed, bgs. ..... lb. .14¼- .17¼
Triple-pressed, bgs. ..... lb. .17 - .19½
Stearine, oleo (see Oleostearine.)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston ..... gal. .1475- —
tanks, group 3 ..... gal. .12875 —
Stramonium leaves, bgs. ..... lb. .16½- .18
Streptomycin sulfate, bulk,... gram. .03 - 032
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works. lb .35 - —
dms., 1-ton lots, works ... lb .37 - —
Tech., dms., works ... lb .19 - —
Strontium chromate fib dms, dlvd. lb. .48 - —
Strontium iodide jars, 25-lb lots lb 3.57 - —
Strontium nitrate bgs., c.l., works 100 lbs. 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb 1.83 - —
Strontium sulfate, air floated, 90%, 325 mesh bgs., works. ton. 56 70 -66.15
Strophanthin G (see Quabain, USP)
Strophanthin K bots. oz. 25 00 -25 50
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax gum USP cs. lb 4.50 5.50
Styrene monomer, polymer grade, 99.6% dms., c.l. frt alld. lb. .17 —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. 14½ - —
Styrene monomer, tech., 99.2%, dms., c.l. lb. .1504- —
dms., l.c.l., same basis ... lb. .1704- —
tanks ..... lb. .1254- —
Above prices are escalated for each calendar quarter on the basis of cost of benzene and petroleum refining labor.
Styrolyl acetate, bots ..... lb. 1.03 - 1.10
Succinic acid, purif., cryst., dms., t.l., frt alld lb. .62 —
dms., t.t.l., same basis lb. .63 75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
Sucrose, refd. white ngs. refy lb. .0970- —
Sucrose acetate isobutyrate, 90%, dms. t.l., dlvd lb. .33½- —
dms., t.t.l., same basis lb. .35 - —
tanks, same basis ..... lb. .31 - —
100%, t.l., dms., dlvd. ..... lb. .35½- —
t.t.l., dms., same basis lb. .37 - —
Sucrose octa-acetate denaturing grade 100-200-lb. lots, bgs. l.c.l. works lb. 1.00 —
Sugar (see Sucrose)
Sugar cane wax dom., refd. slabs, 80-lb ctns., works lb. .60 .65
80-lb ctns., spot ... lb. .65 75
Sulfabenzamide, dms ..... kilo 8.80 9 90
Sulfabenzamide-sodium, dms kilo 9 00 -10.10
Sulfacetamide USP fib dms kilo. 6.61 6 83
Sulfacetamide-sodium USP, fib. dms kilo 8.15 9 25
Sulfadiazine USP, microcrystals, dms kilo 23 35 -24 45
USP, powd. dms kilo 22 60 -23 70
Sulfadiazine sodium, USP dms kilo. 24 80 -25 90
Sulfaguanidine NF X, dms kilo 5.50 6 60
Sulfamerazine-sodium USP, powd., dms kilo. 24 80 25.90
Sulfamethazine USP XV microcrystals, dms kilo. 19 65 -20 75
USP XV powd. dms kilo 18 75 -19 85
Sulfamic acid, cryst, dms., c.l., t.l., works 100 lbs 16 00 —
dms., l.c.l., t.t.l., works 100 lbs. 17 50 18.50
Gran., dms., c.l., t.l., works 100 lbs. 14 75 —
dms., l.c.l., t.t.l., works 100 lbs 16 25 -17.25
Sulfanilamide, NF, reg., 1,000 lb., frt. equald lb 1.50 - —
NF fib dm. frt equald lb 1.55 - —
Sulfanilamide quinoxaline, veterinary dms kilo. 16.28 - —
Sulfanilic acid, tech. dms., c.l., trt alld lb. .21 - —
dms., l.c.l., frt alld lb. .23 - —
Sulfapyridine, USP XV, powd., bots., tins kilo. 15 45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo. 16 55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 6.90
NF X, powd., dms. ..... kilo 5.50 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 - —
Sulfur, comi., flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines ..... 100 lbs. 3.20 - —
lump, bgs., mines ..... 100 lbs. 2.25 - —
bbls., mines 100 lbs 2 80 - —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton. 23.50 - —
export, f.o.b. vessels, Gulf ports. long-ton. 25.00 - —
US and Canada, f.o.b. vessels Gulf ports long-ton. 25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton. 24.00 - —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 - —
bbls., mines ..... 100 lbs. 7.00 - —
flour, light, bgs., mines 100 lbs. 5.25 - —
bbls., mines ..... 100 lbs. 6.25 - —
lump, bgs., mines ..... 100 lbs. 4.95 - —
rolls, bgs., mines ..... 100 lbs. 5.50 - —
bbls., mines ..... 100 lbs. 6.25 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —
Sulfur, rubbermakers, comi., reg., bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 3.70 - —
98-100%, passing through 325 mesh, bgs., mines 100 lbs. 2.55 - —
bbls., mines ..... 100 lbs. 3.80 - —
refd., bgs., mines ..... 100 lbs. 4.90 - —
bbls., mines ..... 100 lbs. 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 4.00 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .05¼- —
ret. dms., l.c.l., same basis... lb. .05¼- —
tanks, same basis ..... lb. .04½- —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works... lb. .0535- —
tanks, works ..... lb. .045 - —
Sulfur dioxide, refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05¼- —
dms., l.c.l., same basis ..... lb. .06¼- —
tanks, same basis ..... lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs 2 00 - —
cbys. l.c.l., works ..... 100 lbs 2 30 - —
tanks, works ..... ton. 18.60 - —
Sulfuric acid, 66° Be, cbys., c.l., works.. 100 lbs. 2.25 - —
cbys., l.c.l., works ..... 100 lbs. 2.55 - 3.35
tanks, works ..... ton. 22.35 - —
98%, tanks, works ..... ton. 23.50 - —
99%, tanks, works ..... ton. 23.70 - —
100%, tanks, works ..... ton. 23 95 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis. lb. .14¼- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots., extra, cs., l.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton. 25 00 - —
40%, tanks, works ..... ton. 29.00 - —
65%, tanks works ..... ton. 39.50 - —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.00 - —
bulk, f.o.b. vessel at Fla unit-ton. 1.05 - —
Sweet birch oil, USP, northern cns lb 4.00 9 50
USP, southern, cns ..... lb. 2.00 3.05

T

2,4,5-T, dms., c.l., works, frt. equald. lb 1.18 - —
dms., l.c.l., same basis ... lb. 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works ... lb. 1.29 - —
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton. 28.00 - —
bgs., l.c.l., works ... ton. 31.00 -36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York ton. 31.00 - —
bgs., l.c.l., works ... ton. 34.00 - —
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l works ton. 38.00 - —
625 mesh, micronized, bgs., c.l., works ton. 80.00 - —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton. 34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton. 19.40 - —
bgs., l.c.l., works ton. 37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton. 20.00 -35.00
Tall oil, crude, dms., c.l., works lb. .04½- .04¾
tanks, works ..... lb. .02⅞- .03⅛
Dist., depending on grade, dms., c.l., works lb. .07 - .09¼
tanks, works ..... lb. .05 - .08
Tall oil, refd., depending upon grade, dms., c.l., works lb. .07¾- .08¼
tanks, works ..... lb. .05¾- .06¼
Tall oil acids, dms., c.l., works... lb. .07 - .10
dms., l.c.l ..... lb. .07½- .10½
tanks, works ..... lb. .05 - .08
Tallow, edible, tanks, dlvd. ..... lb. .09¼- .09¼
Inedible, fancy, bleachable, tanks. lb. .08 - .06¼
fancy, guaranteed, bulk, f.o.b. steamer lb. .06¾- —
dms., f.a.s. ..... lb. .07⅛- —
tanks, dlvd. ..... lb. .06½- —
Tallow, inedible, No. 1, tanks, dlvd. lb. .05 - .05⅛
Prime, tanks, dlvd. ..... lb. .05⅞- .06
Special, tanks, dlvd. ..... lb. .05½- .05⅝
Sulfonated 25%, bbls., l.c.l lb. .08½ 08¾
50% bbls., l.c.l. ..... lb. .10½ .11
Tallow acids, dist., dms ..... lb .11¾- 14¼
tanks ..... lb. .09¼- —
Hydrogenated, dms. ..... lb. .14 - .16½
Tallow oil, acidless, dms. c.l. . lb. .13½ —
dms., l.c.l. ..... lb. .14½ .15½
Tangerine oil, Florida, dms lb 4.75 —
Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton. 4.75 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb lots lb 2.05 —
bbls., smaller lots ..... lb 2.06 2.07
NF, powd., bbls., 1,000-lb lots lb 1.95 —
bbls., smaller lots ..... lb 1.96 1.99
Tech., dms ..... lb. 1.05 —
Tansy oil, dms ..... lb 6.60 8.00
Tar acid oil, 15-18%, dms., c.l., frt equald gal. .53½- —
dms., l.c.l., same basis .... gal. .55½- —
tanks, same basis gal. .43½- —
Tar acid oil, 25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis .... gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms, c.l., same basis gal. .75 - —
dms., l.c.l., same basis .... gal. .77 - —
tanks, same basis ..... gal. .65 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).

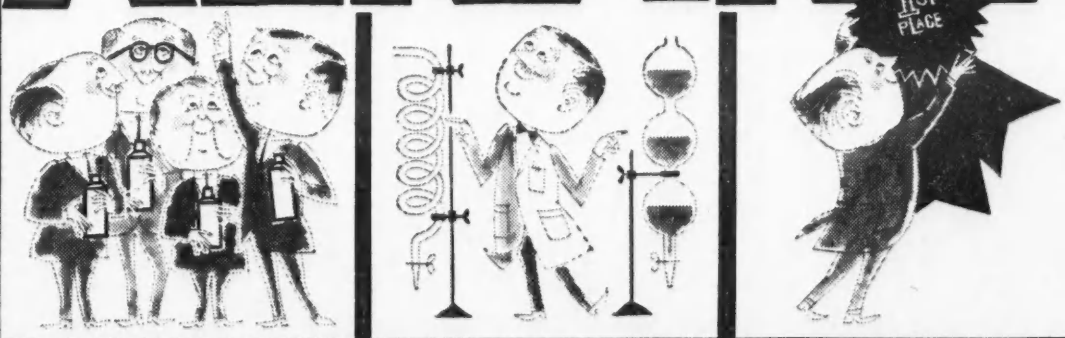
All of the leading detergent producers use ALKANE* based sulfonates in household liquid detergent products

Whether you employ oleum or SO_3 processing, ALKANE will give you the best quality sulfonate for liquids

ALKANE is the world's leading synthetic detergent raw material

ORONITE®

ALKANE



* Oronite's trademark for its detergent intermediate.

CALIFORNIA CHEMICAL COMPANY
ORONITE DIVISION
EXECUTIVE OFFICES • 200 Bush Street, San Francisco 20, California
SALES OFFICES • New York, Boston, Wilmington, Chicago, Cincinnati, Cleveland, Houston, Tulsa, Los Angeles, San Francisco, Seattle
FOREIGN AFFILIATE • California Chemical International, Inc., San Francisco, Geneva, Panama

Tartaric acid, NF, 100-lb bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime dms lb .53 - .56
Terpinyl propionate, dms lb. 1.65 - 1.70
Testosterone, USP, bots gram. No prices.
Testosterone propionate, USP, bots. gram. No prices.
Tetrachloroethane, dms., works lb. .14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchlorethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½ - —
dms., l.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., divd. E lb. .60 - —
dms., l.c.l. divd. E lb. .61½ - —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., divd. E lb. .53½ - —
dms., l.c.l., divd. E lb. .55 - —
tanks, divd. E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb .36½ - —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½ - —
dms., l.c.l., Memphis, Tenn lb. .32½ - —
dms., c.l., t.l., Newark, N.J lb .33½ - —
dms., l.c.l., Newark, N.J lb. .34½ - —
tanks, divd E of Denver lb. .31 - —
tanks, divd W of Denver lb. .32 - —
Tetrahydrophthalic anhydride dms., c.l., t.l., frt alld E lb .39 - —
l.c.l., l.t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, divd lb 7.50 - 10.00
Thallium sulfate, 99% bots. divd. lb 5.00 - 10.00
Theobromine, NF, fib dms 100 lbs., f.o.b., works lb. 4.10 - 4.15
Theobromine and sodium acetate, USP, fib dms., 500-lbs. works lb 6.45 - —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works. lb 3.80 - —
Theophyline, USP, anhyd., 100-lb dms., frt alld lb 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt alld kilo.36.00 - —
USP, ampule grade, fib., dms., frt alld kilo.38.00 - —
Thiamine mononitrate, USP, fib. dms., frt alld kilo.36.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots lb. .76 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA. kgs., works lb 5.20 - —
Tungstated, PTMA, kgs. works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 80% dms., 1,000-lb., lots, works lb 4.00 - —
Thiourea, tech., bgs., t.l., frt alld. lb. .30 - —
bgs., ton lots, same basis lb .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb 3.50 - —
dl-Threopine, dms., 100 kilos, works. kilo.121.00 - —
Thyme leaves, French, triple sifted extra, bgs lb. .27 - —
Spanish, extra, bgs lb. .12 - —
triple sifted, bgs. lb. .25 - —
Spanish, bgs. lb. .09 - —
Thyme oil, NF, red, cns., dms lb. 2.00 - —
NF, white, cns lb. 2.20 - —
Tech., white cns. lb. .40 1.85
Thymol, fib dms., 25-lbs., f.o.b works lb. 2.45 - —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works lb. 7.30 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.03 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.)
Titanium dioxide, anatase, ceramic, bgs., c.l., divd lb. .25½ - —
bgs., l.c.l., divd. lb. .26½ - —
reg., bgs., c.l., divd. lb. .25½ - —
bgs., l.c.l. divd. lb. .26½ - —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla. ton.180.00 - —
bgs., 5-ton lots, Niagara Falls, N Y ton.205.00 - —
bgs., ton lots, same basis ton.215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, nonchalking, bgs., c.l., divd. E lb. .27½ - —
bgs., l.c.l., divd E lb. .28½ - —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., divd lb. .09⅜ - —
bgs., l.c.l., works lb. .09⅞ - —
50% Ti O_2, high-tinting, dms., c.l., lb. .14⅜ - —
dms., l.c.l. lb. .14⅞ - —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½ .29
tanks, works lb. .20 - —
Tobias acid, dms., c.l., t.l lb. .81 - —
dms., l.c.l. lb. .84 - —
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo.67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo.109.00 - —
dl-a-Tocopherol, bots. kilo.99.00 - —
dl-a-Tocopheryl acetate, bots kilo.90.00 - —
25% dry, powd., bots kilo.22.50 - 24.00
33% dry, powd., bots. kilo.30.00 - 31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.35 - —
Paste, kgs., 100% basis lb 1.50 - —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine, hydrochloride paste, kgs., 100% basis lb. 1.50 - —
Tolu balsam, cns. lb. 3.50 - 3.65
Toluene, coaltar, indust., or nitration, tanks, divd. E. of Rockies gal. .25 - —
Toluene, petroleum, indust., tanks, divd. E. of Rockies gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb .16 - —
1,000-lb. or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.
p-Toluenesulfonic acid monohydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb. .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., l.c.l., same basis lb .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms., frt. alld. lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt alld lb. 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - —
Brazilian, Surinam, cs. lb. 1.30 - —
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .22 - —
dms., l.c.l., l.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons. cs lb 4.10 4.20
No. 2, cs. lb 3.75 3.80
No. 3, cs. lb 3.40 3.65
USP, powd., bbls. lb 1.05 1.15
Triacetin dms., c.l., divd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., divd lb. .985 - —
dms., l.c.l., divd. lb. .995 - —
tanks, divd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld E of Denver. lb. .42½ - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½ - —
tanks, frt. alld. E. of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works. lb. .52½ - —
dms, l.c.l., same basis lb. .53½ - —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½ - —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin, dms. l.c.l. divd lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b. works lb. .52 - —
USP, 100-lb. dms., frt. equald lb. 1.25 - —
Trichlorobenzene dms. c.l. frt alld E lb. .15 - —
dms., l.c.l. frt. alld. E lb. .16 - —
tanks, frt. alld. E lb. 13¼ - —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., divd. lb .13¼ - —
dms., l.c.l., divd lb. .16 - —
tanks, divd lb. .12¼ - —
1,1,2 Trichloroethane, dms., c.l., works lb .13½ - —
dms., l.c.l., divd E lb. .14¼ - —
tanks, works lb. .11½ - —
Trichloroethylene dms., c.l., or t.l., divd lb. .14 - —
dms., l.c.l., divd. lb. .15¼ - —
tanks, divd lb. .12¾ - —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb .65 - —
dms, l.c.l. same basis lb .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chys., works, frt. adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., divd lb. .35 - —
dms., l.c.l., divd. lb. .36 - —
tanks, divd lb. .32½ - —
Tricresyl phosphate, petroleum, dms., c.l., divd. lb. .35 - —
dms., l.c.l., divd. lb. .36 - —
tanks divd lb. .32½ - —
Tridecyl alcohol, mixed isomers, dms., c.l. divd. E lb. .26½ - —
dms., l.c.l., divd. E lb. .28 - —
tanks, divd E lb. .24 - —
Triethanolamine dms. c.l., divd E. lb. .24½ - —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine tauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½ - —
dms. t.l.l. frt alld. lb. .26½ - —
tanks, frt alld lb. .24½ - —
Triethylamine, dms., c.l., divd E. lb. .50 - —
dms., l.c.l., same basis lb. .51½ - —
tanks, same basis lb. .47½ - —
Triethyl nitrate, retd., tech., non-ret. dms., c.l., frt. alld E. of Denver lb. .46¼ - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .47¼ - —
tanks, frt. alld. E of Denver. lb. .43¾ - —
Triethyl phosphate, dms., c.l., divd. lb. .40½ - —
dms., l.c.l., divd. lb. .42 - —
tanks, divd lb. .38 - —
Triethylene glycol, dms., c.l., divd. E lb. .21 - —
dms., l.c.l., divd. E lb. .22½ - —
tanks, same basis lb. .18½ - —
Triethylenetetramine, dms., c.l., divd. E lb. .51½ - —
dms., l.c.l., divd. E lb. .53 - —
tanks, divd E lb. .49 - —
Triisobutylene, tanks, divd. lb. .08 - —
Tri-isopropanolamine, dms., c.l., divd. E lb. .23¼ - —
dms., l.c.l., divd. E lb. .24¾ - —
tanks, divd E lb. .20¾ - —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, frt. equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½ - —
tanks, 100% basis, frt equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., divd. E lb. .35 - —
dms. l.c.l., l.t.l. same basis lb. .36 - —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms., l.c.l., works lb. .51½ - —
Tripentaerythritol, bgs., c.l., t.l., divd. E lb. .34 - —
bgs., l.c.l., l.t.l., divd. E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½ - —
bbls., l.c.l., frt. equald lb. .43½ - —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene dms., c.l., divd. E gal. .44 - —
dms., l.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .20½ - —
dms., l.c.l., l.t.l. frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt. alld E lb. .17½ - —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals min. frt. alld E lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
di-Tryptophane, dms., 1 kilo, works. kilo.154.00 - —
Tung oil, dms., New York lb. .24¼ - .24¾
tanks, imported lb. .22¼ - .22½
tanks, domestic mills lb. .22½ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb 4.25 - —
Tungstic acid, tech., dms., 1,000-lb lots, works lb 2.25 - —
dms., smaller lots, works lb 2.45 - —
Turkey red, bbls., works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 - .50
Tuscan red, bbls., frt. equald lb. .26 - .32
Tyrothricin, USP, 1 to 5 kilos gram. .50 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., divd. E. of Rockies lb. .30½ - .35
Jobbing types, dry, bbls., same basis lb. .16 - .22½
Regular types, dry bbls., same basis lb. .16 - .37½
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½ - .07¾
bgs., l.c.l., works lb. .07¾ - .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y lb. .08¼ - —
Raw, American, bgs., works lb. .07¾ - .08¼
Turkey-type, bgs., works lb. .08½ - .08¾
Undecylenic acid, 55-gal. dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l. t.l. dlvd. E ton.98.00 - —
bgs., l.c.l., divd E ex whse ton.100.00 - —
45% N, agricultural, bgs. c.l. (30 tons) dlvd. E ton.100.00 - —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 - —
37 grade, tanks, same basis ton.145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb .65 - —
dms., l.t.l., same basis lb .70 - —
Uva-ursi leaves, bls lb .12 - —

V

Valerian root, Belgian bgs. lb .32 - —
Indian, bgs lb .25 - —
dl-Valine, dms., 1 kilo, works kilo.37.00 - —
Vanadium pentoxide, tech., dms., works lb 1.38 - —
Vandyke brown, bbls, works lb .09½ - .12
Vanilla beans, Bourbon, tins lb 8.25 - —
Mexican cuts, tins lb. 8.50 - —
whole, tins lb. 9.00 - —
Vanillin ex lignin, 100-lb fib dms., 2,000-lb lots or more lb. 2.50 - —
less than 2,000 lbs lb. 2.70 - —
Venetian red, jobbing, bgs., works lb. .0475 - —
Venetian red, 20%, bgs., works lb. .0525 - —
25%, bgs., works lb. .0575 - —
30%, bgs., works lb. .06 - —
35%, bgs., works lb. .0625 - —
40%, bgs., works lb. .0675 - —
Vetiver oil, Bourbon, cns. lb 17.25 - 17.50
Haitian, cns. lb.14.00 - 14.50
Victoria blue toner, molybdated, PMA 250-lb. bbls., divd. E. of Rockies lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb bbls., divd. E. of Rockies lb 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., divd lb. .1810 - —
55-gal. dms., l.c.l., divd lb. .1960 - —
tanks, divd. lb. .1560 - —
tanktrucks less than 4,000 gal., divd lb. .1610 - —
Zone 2, 55-gal. dms. c.l., divd lb. .1910 - —
55-gal. dms., l.c.l., divd lb. .2210 - —
tanks, divd. lb. .1660 - —
tanktrucks, less than 4,000 gals., divd lb. .1710 - —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works, min. frt. alld. E. of Rockies lb. .113 - —
Vinyl ether, USP, anethesia, nots., 50cc., hospitals bot 1.12 - —
bots., 75cc., hospitals bot 1.56 - —
Vinyl ethyl ether tech dms. c.l., works lb. .30¼ - —
dms., l.c.l., works lb. .31 - —
tanks, works lb. .28¼ - —
Vinyl propionate monomer, dms., c.l., divd lb. .49 - —
dms. l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb 1.20 - —
1 to 9 dms., works lb 1.35 - —
tanks, works lb 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½ - —
dms., l.c.l., same basis lb. .18½ - —
tanks, f.o.b. dest. frt. prepaid lb. .14 - —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½ - —
Virginia type red, bbls., works lb. 1.40 - —
Vitiamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼ - —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 - —
325,000 units per gram, same basis kilo.43.88 - —
250,000 units per gram, same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units. .09¼ - —
Vitamin A palmitate, liq., 1,000,000-1,500,000 A units per gram 1,000,000 units. .09¼ - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.45.00 - —
0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo dms. gram.1.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms., gram. 1.00 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B^{12} activity gram.52.00 - —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.52.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin 500-gram bots., 1-5 kilo, dms. frt. alld gram. .90 - —
0.1% cobalamin concentrate in gelatin 1-10 kilo dms., frt alld gram. .90 - —
Vitamin C (see Ascorbic acid).
Vitamin D, (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram less than kilo lots kilo.45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb 2.00 - 2.25
Warfarin, 0.5% dms., 50-lb. lots, divd lb 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb 2.05 - —
dms., 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds., bbls lb. 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms. gal.12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .21 - .22
White precipitate, USP, powd., dms., 100 lbs., f.o.b. works lb 5.50 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .30 - —
Wintergreen oil, USP nat northern, cns lb. 6.35 - 17.50
USP, nat southern cns lb. 3.75 - 7.00
Wintergreen oil, syn (see Methyl salicylate).
Witch hazel bark, bls lb. .16 - .17
Witch hazel leaves, bls. lb. .35 - .40
Wollastonite, fine, paint grade, bgs., c.l., works ton.41.00 - —
bgs., l.c.l., ex whse ton.51.00 - —
Medium, paint grade, bgs., c.l., works ton.29.00 - —
bgs., l.c.l., ex whse. ton.39.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed, Levant bgs lb 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wordwood oil, cns. lb. 4.50 - 4.75

X

Xylene coaltar, indust., tanks, works: Bethlehem, Pa. gal. .29 - —
Birmingham dist. gal. .29 - —
Chicago dist. gal. .28½ - —
Cleveland dist. gal. .29 - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .29 - —
Lackawanna, N.Y. gal. .29½ - —
Lone Star, Tex. gal. .27 - —
Lorain, Ohio gal. .29 - —
Middletown, Ohio gal. .30 - —
Xylene, coaltar, indust., tanks, works: Minnequa, Col gal. .29 - —
Philadelphia dist. gal. .29 - —
Pittsburgh dist. gal. .29 - —
Sparrows Point, Md. gal. .29 - —
Terre Haute, Ind. gal .29 - —
Youngstown, Ohio gal. .29 - —
Xylene, petroleum, indust., tanks f.o.b works: Bayonne N. J gal. .29 - —
Baytown, Tex. gal. .27 - —
Charleston, S. C. gal. .29 - —
Chicago, Ill gal. .28½ - —
Detroit, Mich., divd gal. .27½ - .29
Houston, Tex. gal. .27 - —
Philadelphia, Pa. gal. .29 - —
Providence, R. I. gal. .30 - —
Sewell's Point, Va. gal. .28 - —
Wood River, Ill gal. .28½ - —
m-Xylene, 95% dms., c.l., f.o.b., Richmond, Calif lb. .25 - —
dms., l.c.l., f.o.b., Richmond, Calif lb. .26 - —
tanks, frt. alld. lb. .23 - —
o-Xylene, dms., c.l., works lb. .08 - —
dms., l.c.l., works lb. .09 - —
tanks, works lb. .06 - .06½
p-Xylene, dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .21 - —
tanks, frt alld lb. .1645 - —
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb. .23 - —
56°-58°C., m.p., dms., l.c.l., works, frt equald lb. .33 - —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis, lb. .40 - —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.25 - —
dms., l.c.l., same basis gal. 1.30 - —
tanks, same basis gal. 1.05 - —
Xylenol fraction, b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis, gal. 1.35 - —
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis gal. 1.40 - —
2,4-Xylidine, tech., dms., frt. alld. lb. 1.15 - —
2,5-Xylidine, tech., dms., frt. alld. lb. 1.20 - —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .33 - —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb 2.15 - 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces, divd lb. .27 - —

—Continued on page 43

Oil, Paint and Drug Reporter

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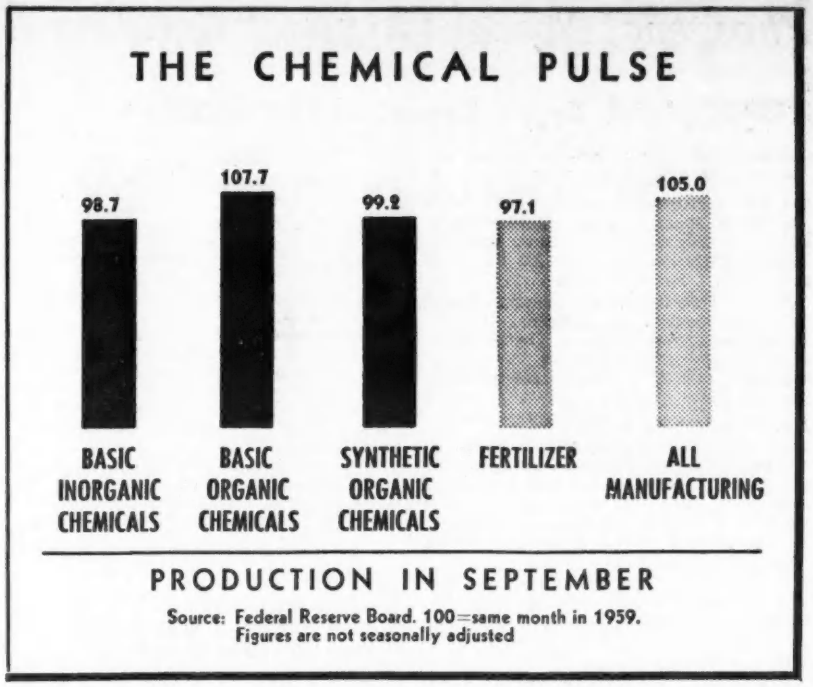

New World Trade Unit

Promotion of the Organization for Economic Cooperation & Development got much serious consideration by the parliamentarians of the North Atlantic Treaty Organization, meeting in Paris last week. That organization represents twenty nations. It was set up last July to succeed the group of eighteen European nations and to include the United States and Canada. Approval of US membership and participation in the general, somewhat limited OECD world trade role will be proposed in the US congress at its next session. Members of that body who are interesting themselves in the project have expressed a strong expectation that full approval will be given.

One of the objectives of OECD in world trade—to which its designation, "Cooperation," is applicable—will be the enlistment of the European members as sharers of the burden of NATO and other financial aid programs now borne almost wholly by the United States. That should do more than a little to warm up the congressional attitude toward approval of the new world trade promoter.

It should also have some measure of motivation in the direction of interesting US business in overall development of world trade. It might even do something usefully needed to counteract such attitudes of that business as the one that has induced the Bureau of International Expositions to repeat with respect to the 1964 world fair in New York, its orders of twenty years ago, calling upon its thirty national members to boycott the fair. The reason —"because it flagrantly violates BIE regulations."

In its characteristically self-centered insistence upon how things should and must be done if it is to have any part in their doing, the reaction of US business toward OECD policies and programs could be anything but cooperative, no matter what had been approved by the congress. It is to be hoped — and pressed — that business leaders who know what is what—and why—in world trade will push home what one of them said a short time ago at the world trade dinner of the National Foreign Trade Council:

"The irresistible determination to achieve new and higher levels of economic development is universal, and although this drive has in it the seeds of much trouble in the decade ahead, it can be the world's most important unifying force."

Competition is still the life of trade; but unification is what makes that life worth living. Trade must be pushed in both directions with complete mutual understanding of what it is all about. OECD can contribute most beneficially to that.

Science for What

The Presidential panel of science advisers has set forth in a voluminous report what it considers to be the responsibilities of the federal government in the promotion of a "vigorous program of basic research and graduate science education on the nation's university campuses." It proposes twenty-four steps in the direction of what the President said "can best assure the strength and progress of American science, one of our essential resources for national security and welfare . . . That will maintain the leadership of American science."

Here is the prelude to the science advisers' declaration of dependence: "In view of the growing importance of scientific research to national security and welfare, all parts of the national community should assume a greater responsibility for supporting, strengthening, and expanding basic research and graduate education." Six general recommendations — or opinionations—follow that line.

Eight recommendations are then addressed to universities, with the conclusion that they "should accept primary responsibility for insuring that their growing partnership with the government reinforces their freedom and excellence." Nine recommendations have to do with the responsibility and role of the federal government, which is advised to "strengthen its ability to establish general policies covering its support of basic research and graduate education at universities . . ., utilizing appropriate advisory machinery." All those words without any definitions!

Because the program is at the collegiate level, it does not have the threat of potential destructiveness popularly presented on television. But, it leaves wholly to conjecture what would be its applicable objectives. Science has a boundless area of semantic application, not a few sectors of which have little if any relation to national—or human—security and welfare.

A more specific trend was noted in the public press about the same time in a news item telling that the chief executive of a Philadelphia pharmaceutical manufacturer had given Yale University, of which he is an alumnus, ten million dollars to provide a completely new science center, comprising chemical and biological laboratories, increased spaces for geology and physics, a library, an auditorium and other facilities.

The world's biggest need for promotion of the advancement and application of science is in the areas of social science—in the instilling among all thinkers of due regard and respect for what should be the objectives of scientific research and its technological applications to the needs of the human race for satisfactory survival. A most commendable advisory contribution was made in that direction about the same time that the panelists' advising was done, by a New York clergyman of the Jewish faith, who called for close earnest cooperation between scientists and clergy "to consider the future of man on this planet."

He declared with fully justifiable logic that there is no basic conflict between the two groups and that they should actually complement each other. Among thinking men, there can be no conscientious disagreement with his conclusion that physical science "studies, weighs, tests and measures nature; but it cannot illumine the goals, the values, the ideals, the moral ends by which its amazing achievements may be regulated and controlled."

Washington Talks It Over

Chemical Executives Know Their Way Around the Regulatory Agencies of the Government Now, But Will They Be as Agency-Wise After President-Elect Kennedy Takes Over the Reins?

By Ralph L. Cherry
Washington Editor

One of the big speculative arguments taking place in Washington these days—one in which the chemical industry has a vital interest because of its many points of contact with the government—is what is in store for the regulatory agencies when President-elect John F. Kennedy takes over next January 20.

Is a major reorganization of the whole regulatory agency concept in prospect, or simply an effort to revitalize enforcement programs through the injection of new blood into the system? Answers to these questions will come when James M. Landis makes his report to Mr. Kennedy next December 15.

The brief time in which Mr. Landis was given to make his study and recommendations has given rise to two lines of speculaiton:

- That Mr. Kennedy already has some ideas growing out of the disclosures of the Harris subcommittee on legislative oversight of what should be done.

- That reformation of the regulatory agency setup is to be one of the first orders of business in the new congress to reduce business influence in the agencies.

Mr. Landis is well acquainted with the problems involved in government regulatory activities, having served on both sides of the table over the years. He was once chairman of the Securities & Exchange Commission, having succeeded the President-elect's father, Joseph P. Kennedy, with whom he later became a business associate.

He also served as chairman of the Civil Aeronautics Board. Subsequently, he has practiced before several agencies as counsel for various business groups.

He has some definite ideas on what is wrong with the present setup—mostly that something should be done to speed up their process of administering the law. Some of his thoughts were outlined to the American Bar Association recently by Mr. Landis. Undoubtedly, some of them will also find their way into his reports to Mr. Kennedy. Included in his reform program are these major innovations:

(1) Tighter evidence rules to shorten proceedings; (2) curtailment of hearings to reduce costs without putting proceedings in the straitjacket of strict courtroom rules; (3) more authority for hearing officers to halt repetitious arguments and proof by government counsel; and (4) elimination of almost automatic appeals of examiners' decisions.

OPD'S BOOKSHELF

The Organization Doctor

Whether he likes it or not, the industrial physician's task has broadened far beyond the conventional practice of medicine. True, he must still be adept at emergency repair jobs. But at the same time he must also be initiated in the mysteries of employee relations and psychiatry and have an engineer's appreciation of plant safety problems.

So argues the medical staff of E. I. duPont de Nemours & Co., as that pioneering group brings the company doctor's profession up to date in MODERN OCCUPATIONAL MEDICINE*, revising a work first published in 1954.

With each section written by an expert in the field, the book covers duPont's forty years of experience in preventive medicine, industrial psychology, biostatistical research in medical problems and alcoholism.

Though originally planning this as a guide for duPont's own physicians, the authors have expanded their approach so as to make the volume just as useful to physicians, executives, safety engineers and chemists throughout industry.

New chapters included in the present edition cover chest diseases and psychiatry. In addition, the section on safety presents a fresh approach to safety education as a means of minimizing the human failures that cause most accidents.

* MODERN OCCUPATIONAL MEDICINE. Edited by Dr. Allan J. Fleming, Dr. C. A. D'Alonzo and Dr. John A. Zapp. Lea & Febiger, Philadelphia. $12.

Phosgene, Now a Chemical Building Block, Seen at 230 Million Pounds in '65

OPD Special 'Depth' Report on Phosgene

—*Continued from page 3*

the manufacture of specialty isocyanates —between them possibly more than a million pounds a year right now. Eastman Kodak Company also makes an isocyanic acid ester.

Why are the isocyanates responsible for this fast upsurge in phosgene? Chiefly because of urethane foams. Consumption of rigid and flexible foams in 1960 is estimated at more than 100 million pounds.

Rise in Foam Consumption

By 1961, anywhere from 120 million to 185 million pounds of foams are expected to be used, depending on who your forecaster is. In 1962, consumption could reach 175 million pounds; in 1964, 275 million, and in 1965, anywhere from 300 million to 360 million pounds.

Urethane foams are booming because of increasing success in the flexible foam field in furniture, automobile upholstery, mattresses, clothing interliners and the like.

Even more promising is the rigid foam field, where urethanes are expected to move up strongly as insulation material in refrigerators, cold-storage rooms, ducts, truck and freight-car linings, building paneling and a number of other uses, including marine flotation applications.

Less-publicized than foams, but potentially of great future importance, are urethane-based coatings. Right now, TDI consumption in coatings may not exceed 500,000 pounds annually. But in the next few years several million pounds could go into coatings applications.

Then there is that ephemeral spectre hanging over the rubber industry: the 100,000-mile urethane tire. Several years ago, prospects for this tire appeared good.

Now, things don't look so attractive. Key factor is cost. Further, who needs a 100,000-mile tire on a car that will, in all probability, be traded in after three years, or after some 40,000 miles?

While the idea still lingers, it's more than likely that the urethane elastomer tire will be confined to specialty industrial uses where heavy wear is a crucial factor.

Isocyanates' Major Role

With foams and coatings booming, and the faint possibility of increased elastomer business, it looks as though isocyanates will play the major role in phosgene expansion for the next five years.

But other end-uses will play their parts in the rise in phosgene consumption. Polycarbonate resins, for one, will probably account for well in excess of 1 million pounds of phosgene this year, and probably 30 million pounds in 1965.

General Electric Company has just finished building a 5-million-pound-a-year "Lexan" polycarbonate resin plant at Mount Vernon, Ind. Mobay is now operating a 5-million-pound plant at its New Martinsville location.

It's expected that GE will have a 4-million-pound phosgene plant in operation soon at Mount Vernon (it's buying phosgene now). Mobay's phosgene expansion, while largely for isocyanates, will be governed by increased polycarbonate resin requirements.

Strong suit of polycarbonates is for specialty purposes in the industrial field, where more than 300 applications have been found by GE alone.

A key limitation to large volume at present is high price. GE is moving to remedy this situation, and recently hacked prices by 41 percent below levels of six months ago (OPD, 11/14/60).

Polycarbonate Growth Forecast

By 1965, present producers estimate a polycarbonate resin consumption of from 30 million to 50 million pounds. By 1970, use is forecast at 75-100 million pounds. This latter figure could account for as much as 60 million pounds of phosgene.

Perhaps markets would expand even more rapidly than this were it not for a rather complicated patent and cross-licensing situation. Currently, GE and Mobay are cross-licensed to the hilt owing to simultaneous discoveries.

This state of affairs has discouraged Union Carbide Corporation from proceeding with plans for a polycarbonate-type of material.

Right now Columbia-Southern Chemical Corporation, a subsidiary of Pittsburgh Plate Glass Company, is sitting on a 1,000-pound-a-day pilot plant for polycarbonates in Barberton, Ohio, keeping its fingers crossed that it's not in violation of some agreement. So far, things look good for C-S.

Japanese producers have gone ahead and put up plants despite the licensing wrangle, and there's some concern here that imported material in finished products might put a crimp in future polycarbonate sales.

But should patent arrangements be straightened out, owing to the wide range of available polyphenols a broad spectrum of polycarbonates could come to the fore rapidly. This, of course, would call for consumption of phosgene in excess of predictions.

Other resins consuming phosgene in their manufacture include a diallyl carbonate ester of bisphenol-A, being worked on by B. F. Goodrich Chemical Company, and "CR-39," an allyl diglycol carbonate ester produced by Columbia-Southern since World War II.

So far, neither material has shown signs of spectacular development, the C-S resin having been on the market for more than fifteen years without notable growth.

Carbamates are also expected to use increased amounts of phosgene during the next five years. This category includes products made by duPont, Carbide, Stauffer Chemical Company, Food Machinery & Chemical Corporation and Columbia-Southern.

Right at present, it's believed that duPont's CMU herbicide — chemically known as 3-(p-chlorophenyl)-1,1-dimethylurea—leads the pack among carbamate consumers of phosgene.

Carbamates at LaPorte

At LaPorte, Tex., the company also makes 1-n-butyl-3-(3,4-dichlorophenyl)-1-methylurea; 3-(3,4-dichlorophenyl)-1,1-dimethylurea; 1,1-dimethyl-3-phenylurea and other herbicides of the carbamate type.

Moving up fast in the pest control picture is Union Carbide's "Sevin" insecticide. UCC has just put the finishing touches on a 25-million-pound-a-year plant in Institute, W. Va. Phosgene requirements run at 15 million pounds, provided such a plant operates at capacity.

This material has received favorable attention throughout the cotton south, and is supposed to gain widespread acceptance, according to Carbide's plans.

Columbia-Southern makes the herbicides IPC (isopropyl N-phenyl carbamate) and CIPC (isopropyl N-(3-chlorophenyl) carbamate) at Barberton, Ohio.

Stauffer makes "Eptam," a herbicide, at Richmond, Calif. The material ran into some rough going last summer owing to adverse rulings on its use on corn.

Things are looking up for "Eptam" this year, and Stauffer has enough faith in its selective herbicide to believe it will really take off in the future.

In fact, the compound looks so promising that the company will offer a number of analogs of it commercially in 1961. These materials comprise a new group of chemicals from phosgene not in existence only a couple of years ago.

Looking at the carbamates as a whole, it must be stressed that in the past such pesticides have undergone a high mortality rate. New items coming in have barely taken up the slack caused by old materials dropping out.

But based on possible breakthroughs in the selective herbicide field, and predicated on wide-scale acceptance of "Sevin," phosgene consumption for this group of materials could rise to 30 million pounds annually in 1965 from its present 6-million-pound level.

Other established uses for phosgene include manufacture of organic carbonates and chloroformates. It's estimated that 1.2 million to 1.3 million pounds of meprobamate tranquilizers ("Miltown," "Equanil," etc.) will be made this year—up from 465,000 pounds in 1958.

Fast Phosgene Chemical Growth

This means a rapid growth rate for one of the product's raw materials, diethyl carbonate, produced by FMC and by Delmar Chemical Company.

The way meprobamate sales have zoomed during the last couple of years, it looks like nervous tension might cause the largest single percentage gain in phosgene consumption.

But producers aren't relying too heavily on mass neuroses, realizing that drugs, like insecticides, have a high mortality rate: Something new could come along knocking the meprobamates into a cocked hat.

Another sizable-volume use for a phosgene derivative, in this case ethyl chloroformate, remains shrouded in mystery. Minerec Corporation consumes the chloroformate in the manufacture of flotation agents.

The company refuses to concede more than this. It will not say what the flotation agents are, what they're used for, or how much is made. Minerec consumes part of its output captively and sells some as well.

Outside sources, judging by Minerec's consumption of ethyl chloroformate over the past few years, opine that the company's products haven't shown much growth. Volume is estimated at about 250 tons per annum of finished product.

Delmar and FMC's Fairfield Chemical Division both manufacture a number of specialty phosgene chemicals. These include diethyl and dimethyl carbamates, ethyl carbamate (urethane), ethyl and methyl chloroformates.

From these raw materials are manufactured a variety of small-volume dyestuffs, pharmaceuticals and other materials, including a number of development chemicals.

Columbia-Southern is so interested in furthering phosgene chemistry, for instance, that it has set up a fine chemicals unit at Barberton to make ten-to-200-pound lots of phosgene chemicals on a custom, confidential basis.

Columbia, citing more than twenty years of experience in phosgene derivatives, established the unit to push materials, the development of which otherwise might be hindered by handling hazards and lack of facilities.

C-S makes stipulations about its plant, though: The chemical must already have been synthesized on a laboratory scale, and should show reasonable promise for commercial use.

The company's motives in furthering phosgenation are not altogether altruistic. For one thing, if a promising new chemical comes along, Columbia might produce it itself.

Chlorine Large-Volume Markets Sought

Mainly, however, what's counted on is the establishment of potential large-volume markets for chlorine, in which the Pittsburgh Plate subsidiary has a big stake.

In fact, there's hardly anyone in the alkali industry who hasn't been scrutinizing the phosgene situation very closely during the past couple of years.

One of the key factors in a consideration of phosgene production is that about 70 percent by weight is chlorine. Hence, consumption of 230 million pounds of phosgene in 1965 means approximately 161 million pounds of chlorine consumed.

Hooker Chemical Corporation several years ago produced phosgene, but gave it up. The company could again, however, since it has plenty of chlorine and carbon monoxide.

Diamond Alkali Company is known to

—*Continued on page 33*

PHOSGENE MARKET: THE BOOM IS HERE

Isocyanates Blow the Lid Off Capacity

	Location	1958 (Million Lbs.)	1960 (Million Lbs.)	1962 (Million Lbs.)
Columbia-Southern	Barberton, Ohio	2	2	2
Delmar Chemical	Elkton, Md.	4	6	6
DuPont	Deepwater, N. J.	16	35	60
FMC	Fairfield, Md.	2	2	2
General Electric	Mt. Vernon, Ind.	—	—	4
Mobay	New Martinsville, W. Va.	16	37	65
National Aniline	Moundsville, W. Va.	8	13	40
Nopco	New Jersey Area	—	—	15
Stauffer	Richmond, Calif.	2	2	2
S & W	LaPorte, Tex.	4	8	8
Union Carbide	Institute, W. Va.	—	15	15
Van De Mark	Lockport, N. Y.	2	2	2
Total		56	122	221

Tariff Commission reports that Ethyl Corporation produced and sold phosgene in 1959

Heavy Chemicals

The big, diversified chemical companies are finding the sailing smooth in today's business seascape thanks to a predominance of fair winds. How well it will go after the turn of the year depends on where the national economy is headed, trade sources said last week. If a genuine recession is in store for the economy, that would be an unfortunate coincidence for chemical makers, as more than one spokesman has predicted that the industry's growth rate is set to lose some of its glamour during the next year or so in any case.

A smaller chemical company with outlets in only one or a few areas of the economy may already be finding the going harder, it was said. For example, while lime sales are holding up well on an overall basis, thanks to the upturn in agricultural sales, a plant supplying only the steel industry couldn't make ends meet today, trade sources pointed out.

Chemical makers tied to the fortunes of the copper and aluminum industries are also said to face an awkward position owing to the prevailing oversupply of those metals, which, though now not serious, would count as two strikes amid a major recession.

But such outlets as plastics, food processing, agricultural chemicals, and paints are known to provide a convenient hedge for the chemical firm whose interests are spread thin throughout the economy, these trade sources said.

The American Paper and Pulp Association reported production for the week ended Nov. 19 at 89.1 percent of theoretical capacity, as compared with the revised figure of 96.8 percent for the previous week and 96.3 percent for the corresponding week of last year.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
106.83	106.83	106.84	103.56

For Current Prices see page 8

Acids

Boric—Market for this acid is running along briskly enough as it is, and if a move to stimulate housing construction turns up among the new administration's anti-recession measures, the material will enjoy an even stronger market.

Strongest outlets in the current picture are textile fiberglass and housing insulation, according to reports from the trade.

Supply-demand balance is said to be especially stable at present, in contrast to the see-saw movement that has so often characterized the market, these reports indicated.

Chromic — Metal-plating accounts are stimulating this item to a sterling seasonal performance, trade sources report. Sharpest prod comes by way of Detroit, where the mood, as reflected in new car production, remains hopeful, pending a test in the marketplace come Spring.

Hydrochloric—If there is a business recession in the cards, the people who make chemicals, process foods and drill for oil can still expect to draw relatively strong hands, and their healthy production schedules are based on that sanguine assumption.

Profiting from the almost recession-proof status of these outlets, hydrochloric acid production charges forward.

Hydrofluoric — An aluminum industry spokesman last week cautioned his colleagues against excessive expansion in the face of depressed business conditions and a growth rate of aluminum use that must have its moderate as well as its boom years. Acid makers were tuned in.

Nitric—Industrial accounts remain active, and the plant food people press forward.

Sulfuric—A fair tonnage of acid was moved into consuming channels despite the holiday, despite recession talk, despite the low rate of steel production and no signs of an upturn.

Steel output was scheduled to decline last week because of the four-day work schedule. American Iron & Steel Institute estimated the week's total at 1,352,000 net tons, or 47.5 percent of capacity, as compared with 1,470,000 net tons, or 51.6 percent of capacity, the previous week.

Output during the comparable week a month ago reached 1,545,000 tons; a year ago, during the post-strike binge, it hit 2,540,000 tons.

Bases and Salts

Borax—With approach of winter, antifreeze makers are stepping up intake. Refrigeration accounts continue active. Chemical demand is reported seasonally brisk.

Caustic Soda—Prices, though unchanged for several years, have been in effect modified at some shipping points by freight considerations or barging discounts.

Sales are running along at a fair enough rate, but producers are reportedly having a hard time retaining a good stock balance in the face of a market that has so consistently favored chlorine this year.

Chlorine—Producers who turn out both caustic and chlorine would like to see the latter surrender some of its hegemony in the interest of a better supply-demand picture, sources close to the trade say.

Copper Chemicals—Good demand is reported for most items at the recently reduced price levels. The agricultural grades are doing particularly well, in view of the good crop season that underpins the current plant food effort.

Lime—Rate of activity in this market varies from depressed to full tilt owing to the contrasting end uses and the fact that a lime plant is apt to have all of its eggs in just one of those baskets, as it were.

For example, a plant supplying the Youngstown, Ohio, steel area is likely to be operating at no better than 50 percent of capacity right now. In contrast, another serving the agricultural chemical trade should be working around the clock to keep up with the seasonal influx of orders.

Sodium Silicofluoride—A particularly strenuous campaign by anti-fluoridation forces paid off on election day. Final results reported by the Associated Press for fourteen cities added up to a goose egg for the dental health measure.

Sulfur — Price levels remain as previously. Readers are reminded that OPD's quotations represent the list prices of producers, but not always the realistic levels prevailing in this keenly competitive market.

Nonferrous Metals

Aluminum—Primary aluminum output in the US in October totaled 167,015 short tons, a significant advance over September's 162,882 tons but shy of last October's 173,742.

For the year through October 31, output stands at 1,687,787 tons, slightly ahead of last year's record-breaking 1,636,357 tons.

The all-time record month remains July 1959, when 179,194 tons were turned out. The all-time record quarter is the third of 1959, with 520,216 tons. All figures are from the Aluminum Association.

Lead—US mine production of lead was off about 4 percent in September, totaling 17,672 tons as against the previous month's 18,460.

Output was also running lower for the nine-months period ending September 30: shipments was 18,250 tons, as compared with 20,216 tons in August.

Council of the Ingot Brass & Bronze Industry reported that September's combined volume of ingot brass and bronze 184,442 tons as against 190,665 in the comparable period of 1958.

Stocks of lead in all forms at smelting and refining plants closed the month at 289,562 tons, up from 282,941 a month earlier, and the highest since April 1959.

Magnesium — Net shipments of magnesium mill products in September amounted to 2,125,000 pounds, up 15 percent from August's 1,853,000 pounds, the Bureau of Census reports. Shipments in September 1959 were 2,288,000 pounds, the Bureau notes.

Mercury—Prices held their own at $209 to $212 a flask for large lots, prompt shipment, against slow to moderate sales.

Silver—The long standing quotation of 91⅜c. a troy ounce, spot, was maintained.

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Heavy Chemicals

Tin—Business was slow during the holiday week, but Straits metal held fast to its $1.03 price tag.

Tin consumption in the US increased 7 percent in August, the Bureau of Mines reports. For primary tin, the total was 4,635 long tons, as against only 2,185 in August. At brass mills, consumption was 60 long tons, up from 40 in July, Mines notes.

Stocks experienced a slight increase, closing the month at 35,515 long tons, up from 34,965 a month earlier.

Industrial stocks in the US, however, decreased for the ninth consecutive month, falling 280 tons to 20,370, the lowest level reached since November 30, 1958.

Imports of tin-in-concentrates during the month were 1,555 long tons; 1,432 from Indonesia and 123 from Thailand, all destined for refining at the Texas City, Tex., smelter.

Imports of pig tin were 3,780 tons, comprising 3,170 from Malaya-Singapore, 295 from the United Kingdom, 230 from Belgium, 117 from Bolivia, 30 from Portugal and a sole ton from the Netherlands.

Titanium—General Services Administration has accepted bids totaling $535,826 for equipment and material at the Cramet titanium plant in Chattanooga.

High bids totaling $198,685 on other items were turned down when it was determined that these items were wanted by other federal agencies, a GSA spokesman discloses, noting that government agencies have first call on real and personal property that has been declared surplus by one agency and is offered for sale.

Polyvinyl Fluoride Set

—Continued from page 4

try as a surfacing material for prefabricated commercial building panels, prefinished residential siding and industrial roofing.

The new facility will be operated as a unit of the Yerkes Film Plant, which now turns out cellophane, polyethylene film, "Vexar" plastic netting, and cellulose bands.

With commercial output, a price reduction under the current development price of $5 a pound is anticipated.

Soviets Still Looking

—Continued from page 5

phosphoric acid plant, and the other covering compressors for urea plants.

During this same period, the department denied one export license application covering technical data necessary to engineer, design and construct a synthetic rubber plant in Rumania.

Among commodities approved for export to the Communist area in the third quarter were $764,828 of chemicals and plastics to Czechoslovakia and East Germany, while items rejected included $140,233 of pentaerythritol to Czechoslovakia, $19,800 of cobalt metal to Hungary and a second rejection of $120,000 of synthetic rubber to Czechoslovakia.

Chemical Projects Firm Incorporates in New York

Chemical Projects Associates, New York, has just announced its incorporation. The firm was organized in 1950 as a partnership by Herman K. Nieuwenhuis and Walter J. Levy. Under the corporate set-up, Mr. Nieuwenhuis becomes president, and Mr. Levy chairman of the board.

As Chemical Projects Associates, Inc., the firm expects to broaden its activities and services to domestic and overseas clients.

David Arkin, formerly assistant to Mr. Nieuwenhuis, has been appointed vice-president.

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Phosgene: A Chemical Building Block

OPD Special 'Depth' Report on Phosgene

—*Continued from page 30*

have made a recent study of the situation. Stauffer has offered phosgene for sale in the midwest from its Richmond, Calif., plant. Ethyl Corporation reportedly produced and sold phosgene in 1959, according to the Tariff Commission.

But the fact is that there are many problems confronting a producer of phosgene. It's significant to note that with all the increase in volume, less than 16 million pounds out of the present 122 million pounds of capacity is available for sale this year.

By 1962, only 7.2 percent of total capacity will be for sale. There are twelve known producers of phosgene today, but only three of them—Delmar Chemical, S&W Chemical Company and Van De Mark Chemical Company—sell on the open market.

Merchant Phosgene Capacity

Capacities for the three add up to about 16 million pounds and are flexible a couple of million pounds either way. Delmar, in fact, says it consumes more than half its output capacity, leaving a total of somewhat less than 13 million pounds for merchant use.

There are several reasons why the open market for phosgene is small:

- It is easy to make, but nasty to handle. Interstate Commerce Commission rules permit transport only in cylinders and one-ton specially built, containers.
- Phosgene costs 15½ cents a pound in cylinders, f.o.b. works, and the price has been the same since 1947. This despite stiff increases in the cost of chlorine, CO, labor, materials and plant.
- Producers of phosgene chemicals are content to buy their raw material as long as their requirements are small. But as soon as needs get big, they build their own generators (usually tied right into the production line for safety's sake) and are, thereby, eliminated as phosgene consumers.

While the phosgene price hasn't changed in fourteen years, it's still something less than a bargain to a huge-volume consumer.

Further, even if a tankcar were constructed with ICC sanction to ship large quantities over long distances, it would still be cheaper to build a generator on the plant site, operated either by a merchant or by the consumer itself.

Therefore, while phosgene looks like a sure bet for booming growth in the next five years, prospects for a new merchant producer are far from attractive under present conditions.

When does a consumer put in its own plant? It's hard to say. Carwin Company, with a combined isocyanate capacity of over a million pounds annually, buys its phosgene at Houston, Tex., and at North Haven, Conn.

General Electric's polycarbonate plant will be serviced by a GE-owned phosgene generator, now being built for it by Delmar. DuPont makes its own phosgene at Deepwater, N.J., but buys it from S&W Chemical at LaPorte, Tex., for its carbamate line.

S&W (the "S" stands for Roger W. Shaft and the "W" for James S. Waters) supplies phosgene for Carwin's plant and at one time supplied Stauffer with material before it got its phosgene unit operating for "Eptam."

Messrs. Shaft and Waters are also the principals in Delmar Chemical, but the two companies are separate entities. Delmar will supply phosgene f.o.b. its Elkton, Md., plant, build and operate a "next-door" unit for a consumer, or build plants on a turnkey basis (as for GE).

Limits on Open Market

Hence it can be seen that the merchant phosgene business is today, by its nature, a specialty business, limited largely by ICC restrictions and production economics, as well as safety in handling.

Whether merchant or captive, there are two major considerations in building a plant: 1) safety and 2) availability of CO. Safety considerations can be licked with special equipment and automatic controls. Carbon monoxide availability presents the primary economic problem in manufacture.

And with the rise in phosgene consumption, capacity will also rise. Manufacture is relatively simple: CO and chlorine are passed over activated carbon with an excess of CO.

Plants being built today are such that expansion is easy with a few minor changes. And the way phosgene use is rising, these adjustments may be made sooner than you might think.

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1958 . . .	14 million lbs.
1957 . . .	10 million lbs.
1956 . . .	100,000 lbs.

*Estimate

Source: Tariff Commission

Phosgene Reprints Available Soon

OPD's special "depth" report on phosgene is being reprinted and will be available shortly. Copies may be obtained at 35 cents each (discounts on quantities of a hundred) from OIL, PAINT and DRUG REPORTER's Reprint Department, 30 Church Street, New York 7.

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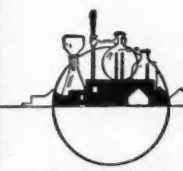

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OPD Reports From Europe

Britain's Crisis in Plastics Is Battled

—Continued from page 7

form of polystyrene from 50 cents to 46 cents a pound for the standard grade.

Despite such current gloom in the styrene picture, Forth Chemicals, Ltd., plans a new $8.4 million styrene monomer plant to be built near the new British Petroleum Co., Ltd., refinery in Wales.

Forth—owned two-thirds by British Hydrocarbon Chemicals (itself a join venture of BP and Distillers) and one-third by Monsanto—is now expanding its Grangemouth, Scotland, styrene monomer plant to 50,000 tons a year. The new Wales plant will carry total styrene monomer capacity of the company to 100,000 tons annually.

Ethylene for the new styrene monomer plant will be supplied by the British Hydrocarbon Chemicals plant associated with the refinery. Benzene, the other primary raw material for styrene monomer, will be purchased from outside sources.

Polyethylene Packaging Demand Strong

Demand for polyethylene in its classic packaging and household goods applications has continued strong so far in Britain. The problem is the much more rapid growth in productive capacity added to a world surplus capacity, particularly in high density polyethylene.

Britain last year produced 90,000 tons of polyethylene, and Imperial Chemical Industries, Ltd., in whose laboratories the plastic was invented in the 1930's, now claims a capacity of 105,000 tons a year.

In addition to that, Bakelite-Union Carbide, Shell, Monsanto and British Hydrocarbon are all crowding into the business and by the end of 1961 combined polyethylene capacity may well be over 170,000 tons a year—or nearly double 1959 output.

The polyethylene situation will soon be further complicated by the appearance of commercial quantities of polypropylene from ICI and a little later from Shell.

It's the general feeling among British producers that some recent arrivals in the polyethylene business have intensified competition without increasing total plastic sales. And there is a fear that polypropylene at first may tend to have the effect of taking sales from polyethylene.

The secret of polyvinyl chloride's success during the present auto and consumer durable slump in Britain is a strong field of industrial applications, particularly for cable insulation, corrosion resistant piping and coating of steelwork.

Both the ICI and Distillers' subsidiary, British Geon—the two major UK producers—are in process of expanding their PVC output.

Plastic producers in Britain hope the current recession in their activities, marked by a slight dip in the second and third quarters from peak sales in the first quarter of this year, will be short-lived. Most continue to express satisfaction with the way the British home market is developing.

But exports for plastics are the crucial question for the export-oriented British chemical industry. There have been many complaints about cut-priced US plastics in world trade this year.

In general, export prices today are only marginally profitable and there's some feeling that in plastics, such as polyethylene, this condition may be permanent.

Rayon Staple Fiber Imports Come Under Dumping Probe

The Bureau of Customs is conducting an investigation of imports of rayon staple fiber from West Germany to determine whether they may be violating the antidumping law.

The investigation is based on a complaint that the product is being sold in this country at less than its foreign market value. Customs officers have been instructed to withhold appraisal of entries of the fiber from this source pending results of the investigation.

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Agricultural Chemicals

Fertilizer costs, farm income and primary plant nutrients consumption came in for close scrutiny last week, from various quarters of the US Department of Agriculture. Farm economists, gathered for the annual Agricultural Outlook Conference, anticipate farm income to hold at about the same levels established in 1960, barring changes in federal farm programs. They generally expect higher income in the first half of the year with some reductions taking place in the second half.

While the economists feel that the Kennedy Administration will have a bullish effect on farm incomes, they did not consider this factor in making their estimates. In their view, Congress will not be able to enact new programs in time to affect the agriculture picture until 1962. Chances are good however, that some administrative actions may be taken which might influence the farm outlook before 1962.

Tightening of production controls, as well as increasing support levels in 1961 might easily be among the first decisions the new Secretary of Agriculture may make after taking office.

Cost of fertilizer to farmers during the past year averaged about 1 percent higher than the previous year, according to USDA. It expects some further increase in 1961, but this is likely to be offset by price-holding in other quarters.

Consumption of primary plant nutrients for the 1959-60 crop season is estimated at about 7.5 million tons or about one percent above that for the preceding year, USDA reports.

In its outlook report last week, the Department's Research service said this record level of use is expected to be maintained or slightly exceeded for the year ending June 30, 1961. The trend toward higher analysis for both mixed fertilizer and straight materials will probably continue, according to the farm cost situation report.

September prices paid by farmers for fertilizer averaged about 1 percent higher than a year ago and 7 percent above the 1947-49 average.

Farm cash receipts next year will approximate the $33.5 billion received in 1960. Prices for field crops are expected to average slightly lower but crop marketings will run close to 3 percent higher. USDA experts believe that the cost of production items will change little next year on the average, which if the price line holds will mark the first time the average failed to go up since 1953. As a result of the leveling in the revenues and expenses, farmers will probably retain about the same net income next year as the estimated $11.4 billion for 1960.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
111.26	111.26	111.26	110.31

For Current Prices see page 8

Animal and Plant Foods

Production of fertilizers in the Philippines during 1959 amounted to 36,952 metire tons of ammonium sulfate, 9,258 tons of superphosphates and 38,927 tons of mixed fertilizers, reports the Business and Defense Services.

One producer accounts for the country's ammonium sulfate production and two for the superphosphates and mixed fertilizers. Although total output was 40 percent higher than in 1958, the industry reportedly is not prospering.

Fertilizers can be imported by the Government and farmer cooperatives at considerably lower prices than those produced domestically can bring.

The price disparity can in some measure be attributed to the import tax and the 25-percent fee on foreign exchange that fertilizer manufacturers must pay on imported raw materials; fertilizers imported by the Government and cooperatives are exempt from such charges. Inasmuch as the cooperatives supply most of the large consumers, such as sugar and corn growers, local producers are left with primarily the small farmers and in addition, Government - subsidized fertilizer programs.

Fertilizer imports in 1959, nearly 200,000 tons, represented more than twice the production volume. Principal items imported were ammonium sulfate, ammonium phosphates, and mixed fertilizers. The United States, the leading country of origin in 1957 and 1958, dropped to third place in 1959, following Japan and the Netherlands. However, the United States supplied practically all of the 17,000 tons of mixed fertilizers imported in 1959.

Output is expected to decline in 1960 inasmuch as producers had considerable stock of carryover at the beginning of the year, and prices of imported fertilizers probably will remain below those of the domestic product. Long-range prospects for the industry are somewhat more favorable. Producers are planning expansions and process alternations that are expected to lower production costs.

Peatmoss—According to Customs, the imports of peatmoss in September totaled 20,255 tons and was valued at $947,742. Canada supplied 9,485 tons valued at $545,393; West Germany followed with 9,000 tons valued at $338,340. The remainder was split between: Poland, 659 tons ($20,756); Denmark, 580 tons ($24,834); Netherlands, 470 tons ($16,569); and Finland, 61 tons ($1,850).

Potassium Chloride—September's imports totaled 19,670 tons, according to reports from Customs. Imports were divided between West Germany and the USSR. Germany shipped 12,636 tons, while the Russians added 7,034 tons. West Germany's shipment was valued at $375,833; the Russians at $172,855 bring the total to $548,688 for the month.

Pesticides

A large-scale experiment to destroy boll weevils as the insects prepare for hibernation is being conducted in several southern states by the USDA's research service. Experimental stations in Texas, Mississippi, Louisiana and South Carolina, with financial assistance for the National Cotton Council.

The experimental is designed to strike the weevil in the diapause stage of its development. It is hoped that insecticides applied in the Fall can destroy the weevils before they are in complete diapause and ready to hiberate.

Malathion will be applied, two to four times at about 10-day intervals before frost, on some 1,200 acres of cotton in Texas, 250 acres in Louisiana, 25 acres in South Carolina and Mississippi and possibly 10 or 15 acres in Arkansas. Similar treatment in tests last year on 525 acres in Texas resulted in almost complete kill of weevils.

Pyrethrum—Exports of pyrethrum in 1959 from the Congo totaled 261,104 pounds and was valued at $2,422,453, reports BSDA. Shipments went to 16 countries with the leading importer being the US. US imports of pyrethrum from the Congo was 225,528 pounds and was valued at $2,120,141.

BDSA reports that the pyrethrum processing industry in the Congo has been experiencing difficulties in recent years. The original extraction plant constructed in Bahavu had the capacity to produce only 800 to 1,000 tons of the Congo's 1,800 tons of pyrethrum flowers. To remedy this situation, a group of growers incorporated and erected a 3,000-ton plant in Goma.

The new corporation has been handicapped by high plant operation costs and other financial problems, as well as difficulty in meeting product standards. In 1959, other interests gave consideration to the construction of a third plant. However, in December of that year, the Administration blocked this undertaking by forbidding the installation or importation of pyrethrum-processing machinery without prior authorization.

In December, 1958, the Government had passed an ordinance applicable to both the Belgium Congo and Ruanda-Urundi prohibiting exports of pyrethrum flowers and powders unless an exception is made by the Governor General or his delegate. All recent shipments to US processors have been in the form of extract.

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Aliphatic Organics

The majority report last week was that business was drifting along at a fair rate. One source aptly called it "respectable." Price weakness was said to be approaching the chronic stage, and while no one relished the trend, a generally realistic attitude prevailed, trade people figuring that with an excess of productive capacity—in some instances far in advance of demand—and an anxious group of sellers intent on maintaining output at routine levels, commodity-like trading was not only to be expected but accepted.

Weakness persists throughout many chemical consuming industries—textiles, plywood, coatings among them—but in no area is it acute or all-pervasive. Nor can the automotive industry, whose sales of the compacts are going well while its inventory of the larger models rises, be singled out as the source of today's so-called "mild business recession." Consequently, trade people, by and large, expect to see a gradual improvement in business across-the-board before an isolated upturn in any one industry.

Underlying the current slowdown or pause in the economy, according to some thinking today, are serious problems of "policy." Management must now decide, it's said, whether it will continue to stand firm on its official price schedule or sell at whatever price it can get. It must make up its mind either to be aggressive in meeting foreign competition or settle for smaller volume of sales. It must decide—and this is fundamental, of course—what the profit goal is to be.

US business — unfortunately perhaps, —has grown accustomed to a higher level of profit than its foreign competitors, particularly two of its most competent rivals, Germany and Japan. Mass production provided the profit at first and then advertising and a massive marketing effort helped to maintain it. The decisive factor throughout, however, was probably the rapid rate of the country's growth, its increasing wealth, and its unchallenged position industrially.

The situation today, of course, is quite a bit different. Mass production goes unquestioned almost anywhere in the world, and the value of advertising is well established. Outside the US, however, business seeks a relatively small percent of profit and for this reason, foreign manufacturers sell here at less than the going domestic market. Unquestionably, West Germany, Japan, Belgium, Italy and other industrial countries are going to continue to expand production and step up exports. To compete, it seems as if American business is going to have to revise its thinking on "a just profit return."

Price Trends

Advanced
Molasses, N. Y., ½c. per gal.

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
130.70	130.70	130.68	132.95

For Current Prices see page **8**

Acrylates—Hoping to spur demand and broaden the end-use pattern, producers recently dropped prices for both ethyl and methyl acrylate to 32¼c. a pound in tank-car quantities. This represented reductions of 1¾c. and 4¾c. a pound, respectively.

Butadiene—Although the use of neoprene, butyl and N-type rubbers is increasing steadily, SBR accounts for the largest amount of synthetic rubber consumed. Percentage-wise, however, its competitors are running a good race.

All told, production of synthetic rubber in 1959 was 23.4 percent greater than that in 1957 with the several types making these percentage gains: S-type, 24.6; neoprene, 12.7; butyl, 21.0; and N-type, 30.9.

Consumption of synthetic rubber as a percentage of total new rubber consumption continues to increase, registering 65.9 percent in 1959 and 68 percent in the first half of 1960. Usage of synthetic latices have exceeded that of natural since 1956, but it was not until 1959 that S-type became the largest of all latices. Switches from natural to S-type in the cushioning field account for a good portion of the loss.

Annual natural latex use in tire and tire products segment in 1955-59 was 1,016 tons, 726, 759, 627, and 643.

Carbon Tetrachloride — Reports from the trade last week indicated that demand for carbon tetrachloride is routine for the season, supplies fully adequate. Noted also was that prices are stable and unlikely to change in coming months.

Imports of the solvent in September were 426,446 pounds, valued at $24,789 and dutied at $3,676. Sources were: Belgium 312,877 pounds, valued at $17,882 and dutied at $2,660; Italy 80,500 pounds, valued at $4,806 and dutied at $685; and East Germany, the remainder.

While its applications are fairly numerous, carbon tet is used today primarily in the manufacture of chlorofluorinated hydrocarbons, a market that's hooked pretty firmly to aerosols—fortunately a growing one. Other uses include the fumigation of seeds; dissolving oils, fats, waxes and certain resins; and fire-extinguisher fluid.

Ethylene Glycol—September exports of ethylene glycol were 7,485,026 pounds, valued at $769,258. Principal buyers were Canada (5,803,230 pounds, valued at $576,184) and Japan (1,423,293 pounds, valued at $157,894).

Overseas markets consume a large percentage of US output of ethylene glycol. In fact, during the first five months of this year, exports were up 17 percent from the comparable period in 1959. At the same time, US production of the chemical declined 13 percent.

Glycerine—Demand for imported and domestic crude glycerine is reported slow, prices, as one might logically conclude, weak. Last week, sources told OPD that there was little new interest in foreign crude and explained recent imports as shipments against old contracts. The quote on imported crude was seen as 15c. a pound, c.i.f., but due to the lack of trading this was described as nominal.

Domestic crude is being quoted at approximately 17c. a pound for soaplye and 18.70c. a pound for saponification. These listings have been actual trading levels for the past month and, 1 cent lower than prior postings, reflect subdued inquiry.

Several trade people feel that the dull glycerine market is a reflection of the generally depressed state of business.

Exceeding production by 2.6 million pounds, glycerine disappearance in September was 29.3 million pounds, up from 23.1 million in August and 25.8 million in September, 1959.

Total disappearance for the first nine months of the year was 215 million pounds, compared with 196.9 million pounds in the like period of 1959.

Imports of glycerine in September, all classified by the Commerce department as "for immediate consumption," were 1,978,272 pounds and valued at $329,586 and dutied at $4,044. Sources of this material: Philippine Republic, 1,074,797 pounds, valued at $177,191 and dutied at $429; Cuba 444,808 pounds, valued at $74,725 and dutied at $1,780; Argentina 218,939, valued at $37,463 and dutied at $876; Thailand 129,498 pounds, valued at $19,297 and dutied at $578; and Colombia 110,230 pounds, valued at $20,910 and dutied at $441.

Pentaerythritol—A Canadian producer of pentaerythritol is expanding its facilities by 20 percent. It expects to complete the project in December.

The firm's PE output is marketed by a leading US chemicals maker. Both pure and technical grades are offered, the latter as crystals or pellets.

Although PE prices remain unchanged, lower schedules were recently posted for di- and tripentaerythritol. Both chemicals are established at 34c. a pound in the east and midwest, and 35c. a pound in the west for carload quantities. Previously, listings were 6 cents a pound higher.

Perchloroethylene—The market continues quite competitive although demand for the solvent from principal users in the dry cleaning business has increased seasonally. With supplies fully adequate, and lower-cost foreign perchlor available,

Aliphatic Organics

however, the pick-up in inquiry has not stabilized the market to any appreciable extent.

The Commerce department's Business & Defense Services Administration, in a periodic market review, notes that imports of perchloroethylene increased 33 percent in the first five months of 1960 over the comparable period in 1959. Import volume, BDSA says, represented about 11 percent of US production.

Trichloroethylene imports, on the other hand, declined about 5 percent during the January-May period from 1959, while domestic output rose slightly.

Sucrose—Production of sugar cane for sugar and feed is estimated at 7,887,000 short tons, according to the Crop Reporting Board's November 1 forecast. This makes the 1960 crop a record-setter. Output in '59 was 7,138,000 tons.

Production of sugar beets for sugar this year is estimated at 16,576,000 tons, three percent below the record 1959 tonnage (17,015,000 tons) but about one-third above the average yield (12,642,000).

Harvest of sugar beets varies from about two-thirds finished in Colorado, California and eastern Oregon to mostly complete in the North Central area.

Valeric Acid—Bulk prices have been reduced approximately 17 percent. The new schedule is: tankcars, 25½c. a pound; car and truckloads of drums, 28c. a pound; and less carload lots of drums, 29½c. a pound. Quotations are on a delivered basis and are one cent higher in the west.

The lower prices, according to the manufacturer, are expected to arouse new interest and applications research.

Valeric acid is a five carbon straight chain monobasic compound, which undergoes all the usual reactions of organic acids to form salts, esters, amines, amides and halides. It reacts with glycols and polyols to form di- and higher esters, and these, reportedly, have important applications as plasticizers for polyvinyl chloride resins.

Alcohol derivatives of valeric acid (the valerates) are useful as flavoring and perfumery materials. Alkaline earth metal salts of the acid are indicated for mixed salt and grease compositions and the barium salt is suggested as a stabilizer for vinyl resins. Valeric acid should also be evaluated as an intermediate in the preparation of solvents, pesticides, corrosion inhibitors, pharmaceuticals and numerous other product, the manufacturer suggests.

Vinyl Acetate—Imports of vinyl acetate polymer in September were 74,748 pounds, valued at $39,475 and dutied at $3,399. On the suppliers' roster:

Japan 47,545 pounds, valued at $22,483 and dutied at $1,999; West Germany, 15,000 pounds, valued at $8,219 and dutied at $700; Canada 11,511 pounds, valued at $8,097 and dutied at $650; Italy 422 pounds, valued at $500 and dutied at $36; and Denmark 270 pounds, valued at $176 and dutied at $14.

Vinyl Chloride—A reduction in vinyl chloride monomer October 15 was followed last week by a 2 cent a pound cut in pure polyvinyl resins. The latter change, according to some market observers, reflected less the lower monomer price and more the fact of increasing competition, especially from lower-cost Japanese material.

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Imperial Adhesives Starts Up New Cincinnati, Ohio, Plant

Imperial Adhesives, Inc., has started up a new adhesive and chemical plant in Cincinnati, Ohio, for latex and solvent compounds.

Hot melts, polyester, and epoxy compounds will also be manufactured at the plant as well as customer emulsions and dispersions for the trade. The facility has its own railroad siding adjacent to a tank farm, where underground storage facilities provide for 150,000 gallons of latex and solvents. A new continuous-flow processing method plus the fact that uniform temperatures are maintained at all times in the latex tarks are said to insure product uniformity.

FDA Won't Use Shotgun

—Continued from page 5

cancer clause is not applicable, and if the data considered as a whole establish that the color additive will be safe under the conditions which can be specified in the regulation, it may be listed for such use.

"But if, in the best judgment of the commissioner, based on information from qualified scientists, cancer has been induced by ingestion, no regulation may issue which permits its use.

"(b) With respect to color additives that will not be ingested.

Commissioner to Judge Value of Test

"Whenever the scientific data before the commission suggests the possibility that the color additive or any of its components or impurities has induced cancer in man or animals by routes other than ingestion, the commissioner shall determine whether, based on the best judgment of appropriately qualified scientists, the test suggesting the possibility of carcinogenisis is appropriate for the evaluation of the color additive for a use which does not involve ingestion, cancer has been induced, and the color additive or any of its components or impurities was the causative substance.

"If it is his best judgment that the data does not establish these facts, the anticancer clause is not applicable to preclude external drug and cosmetic uses, and if the data as a whole establish that the color additive will be safe under conditions which can be specified in the regulations, it may be listed for such use.

"But if, in the best judgment of the commissioner based on information from qualified scientists the test is an appropriate one for the consideration of safety for the proposed external use, and cancer has been induced by the color additive or any of its components or impurities, no regulation may issue which permits its use in external drugs and cosmetics."

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Coatings Materials

Polyvinyl chloride listings are newly quoted at 18½ cents per pound. The new listing became market-wide after one producer announced the reduction two weeks ago. Other producers quickly adopted the two-cent-per-pound reduction to meet competition. Softening in the listings for PVC had been in evidence over the past few months, particularly in the wire coating and calendering markets. Also coming in for a price cut were the compounds of PVC. They were reduced ¾ cent per pound across the board.

The only other price change taking place in the coatings market for the week was on the gums. Congo Copal No. 2 was advanced 3 to 4 cents per pound with 1 cent advances reported for Dammar, East India Batu, and Singapore No. 1. Both advances went into effect with the announcement last week. Other grades of both Congo and Dammar were reported to be unchanged.

The casein market closed last week with listings at roughly the same levels as in previous weeks. Trade sources report that the market continued to be quiet with buyers still shying away from the market. Stocks were reported to be closely held by dealers but seasonally high in the Argentine. Australian continues to be very tight in supply.

Two new resins were announced by producers. One, a newly developed plasticized dispersion of a high viscosity polyvinyl butyral resin is claimed by the producer to be potentially useful where a low tack, abrasion resistant, high strength film is required. It can also be combined with water soluble or water dispersible thermosetting resins. Suggested areas of application include aqueous-based baking primers, decorative and protective coatings for metal, wood, glass and various other materials.

In an other announcement, a new surface coating resin is reported to have been developed. The new product is said to be formulated for use with alkyds and provides exceptional impact resistance, hardness and mar-resistance to baked enamels while permitting retention of a high degree of flexibility.

Price Trends

Advanced

Congo copal, No. 2, bgs., 3c. to 4c. per lb.
Dammar gum, East India, Batu, nubs and chips, 1c. per lb.
Singapore, No. 1, bgs., 1c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
111.26	111.26	111.26	103.10

For Current Prices see page 8

Prime Pigments

Aluminum Paste and Powders—Shipments of aluminum paste totaled 1,479,000 pounds in September, as compared to 1,855,000 pounds shipped during the previous month and 1,445,000 pounds for September, 1959.

Shipments of flaked aluminum in September was reported at 365,000 pounds. For August, shipments of flaked material was placed at 326,000 pounds and for September of last year shipments totaled 310,000 pounds.

Atomized aluminum shipments were estimated at 1,237,000 pounds in September, compared to 1,431,000 pounds in August and 674,000 pounds for September of last year.

Cadmium Colors—The recent advance of 10c. per pound on the toners and 5c. per pound on lithopones is reported to be fairly established. Demand is presently at steady volumes, and should remain at about the same pace for the remainder of the year.

Copper Oxide—Despite the lower listings of 3c. per pound, that went into effect last month, trade sources do not vote any great improvement in market conditions. Sales volumes are at about the same levels as in previous months.

Dry Colors—Steady demand from consumers is reported for most of the dry colors. Listings are unchanged; supplies ample.

Natural Resins

Gums—Three price changes were reported for the week. Congo Copal No. 2 was boosted 3c. to 4c. per pound, bringing the listings for that grade into a new range of 21c. to 24c. per pound. Also coming in for price changes the Dammar gums. East India Batu, nubs and chips were advanced 1c. per pound, while Singaport No. 1 also gained one cent per pound on its listings.

The latest quotation for East India Batu chips and nubs is for a range of 10c. to 11c per pound. Singapore No. 1, in bags, is currently listed at 35c, to 40c. per pound. Listings for Dammar gum, pale nubs continues at 31½c. to 34 cents per pound, unchanged.

Shellac—Domestic market continues to be reported in a routine situation.. Supplies are said to be ample, with shipments arriving on schedule. Listings are unchanged from previous quotations.

Fillers and Inerts

Asbestos — September asbestos fibre shipments for the industry amounted to 100,302 tons and were reported to be 14,394 tons or about 17 percent above the same month last year. Shipments for the first nine months of 1960 are said to be running approximately 11 percent or 75,282 tons ahead of the pace set last year.

Sources report that demand for asbestos products are in many cases below the levels that were expected for the year. Reports indicate that the outlook for the remainder of the year should be only fair, with some exceptions noted in regard

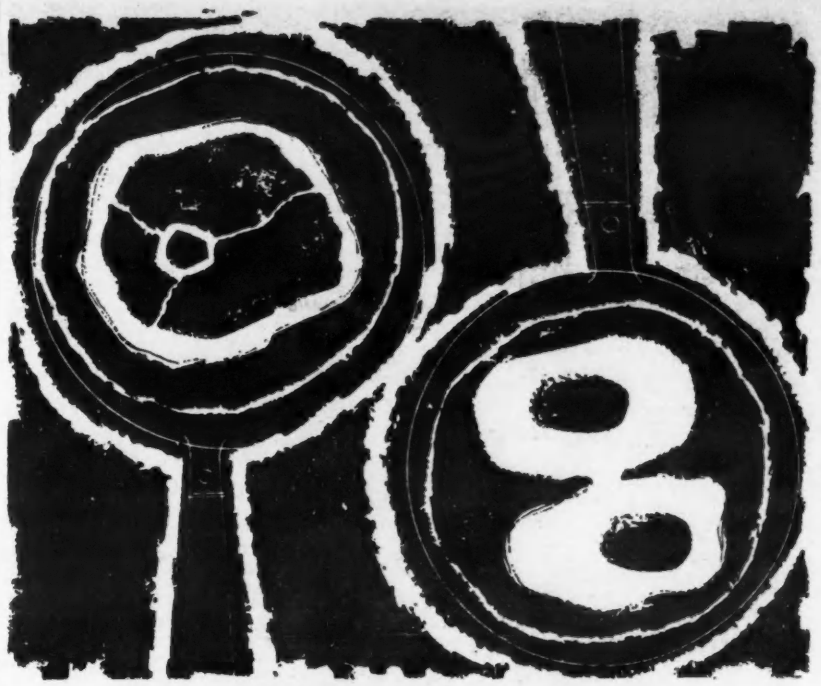
—*Continued on page 47*

Paint, Varnish and Lacquer Sales: 1959

Following are data compiled by the Bureau of Census indicating sales of paint, varnish and lacquer for 1959 by month with sales for 1958 included for comparison.

Year and Month	Total	Trade Sales Products	Industrial Finishes and Special Coatings		
			Total	Paint and Varnish	Lacquer
1959	1,727.4	1,007.8	719.6	529.3	190.3
1958	1,589.3	945.7	643.6	469.1	174.5
1959					
January	121.4	68.2	53.2	38.4	14.8
February	116.3	64.4	51.9	37.5	14.4
March	146.8	84.7	62.1	46.1	16.0
April	165.8	98.6	67.2	50.4	16.8
May	167.7	99.9	67.8	51.3	16.5
June	171.0	102.3	68.7	51.4	17.3
July	162.7	99.0	63.7	47.4	16.3
August	153.0	93.7	59.3	43.2	16.1
September	149.6	89.0	60.6	43.1	17.5
October	139.6	79.0	60.6	43.9	16.7
November	117.3	67.4	49.9	36.6	13.3
December	116.2	61.6	54.6	40.0	14.6
1958*					
January	118.8	67.1	51.7	36.5	15.2
February	106.2	60.0	46.2	32.8	13.4
March	120.1	69.7	50.4	36.5	13.9
April	140.2	86.2	54.0	40.1	13.9
May	152.6	96.0	56.6	41.8	14.8
June	154.0	98.2	55.8	41.5	14.3
July	145.4	92.8	52.6	39.2	13.4
August	145.0	88.1	56.9	42.7	14.2
September	141.9	87.5	54.4	39.4	15.0
October	136.7	78.4	58.3	43.3	15.0
November	120.6	66.7	53.9	38.7	15.2
December	107.8	55.0	52.8	36.6	16.2

* Revised.



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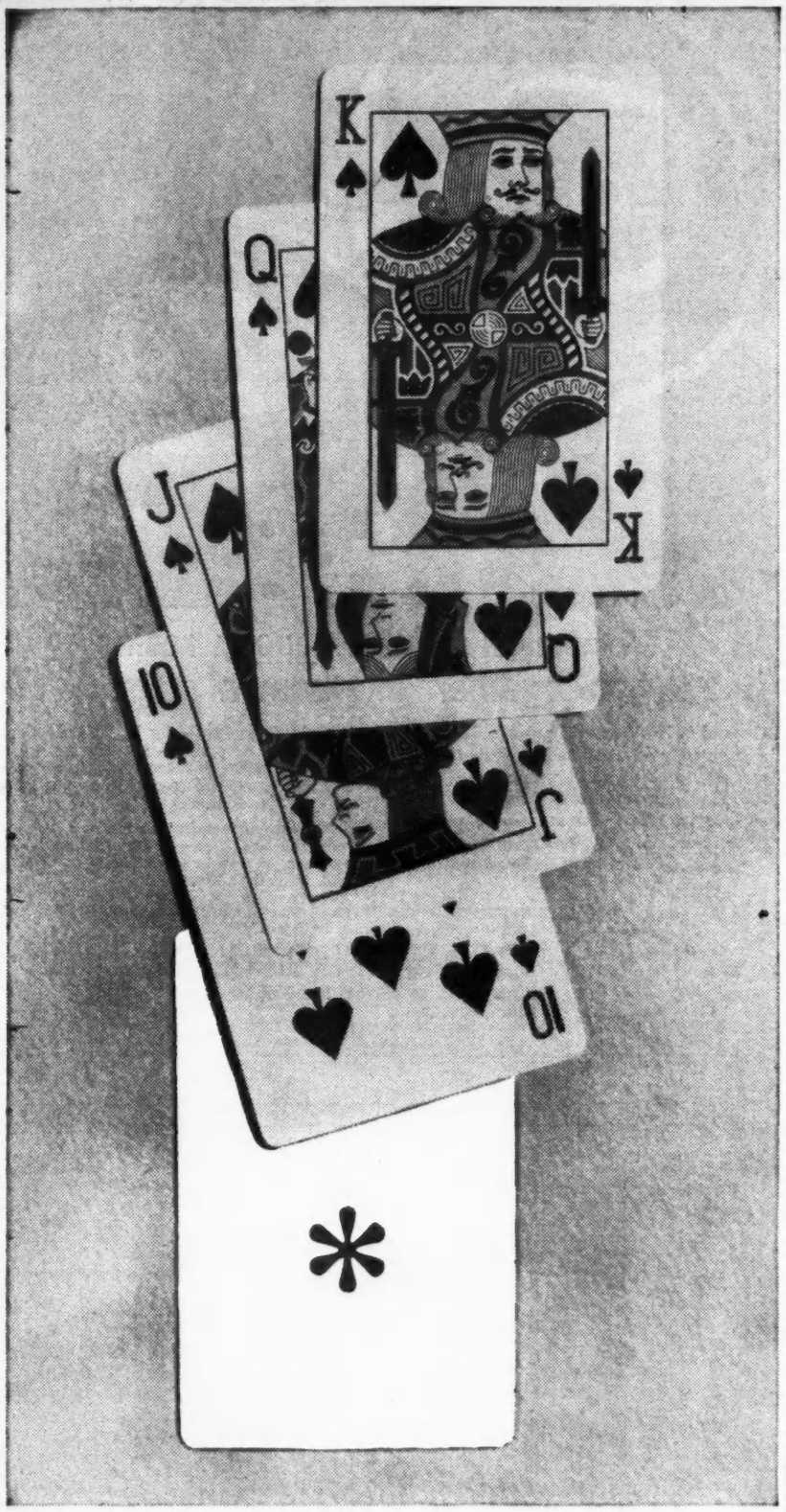

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KOPPERS COAL CHEMICALS

Coal Chemicals

Are other price increases to follow the recent 6-cent boost in 2° pyridine? One such announcement came last week as a major producer narrowed the price spread in phthalic anhydride by making a 1-cent across the board increase. Effective immediately on spot and January 1 for contract the producer's tankcar price is 19½ cents a pound. The increase shaves the industry's price margin from 4 cents to 3 cents with a range of 19½ cents to 22½ cents now being listed for phthalic. It may still be too early to tell if increases are going to be made for other products—notification date is Dec. 15—but it is evident from remarks of executives contacted last week that costs of labor and materials and the difficulty of obtaining good crudes are weighing heavily on their minds as production cost charts are scrutinized. With price change date approaching perhaps the most influential factor under study is the reduced flow of crudes from the cokeovens as steel mills maintain a low operating rate. Result of course is that expenses of chemical producers rise as they attempt to squeeze quality products from whatever crudes are available.

Prospects of an increase in steel rate are dim. With a holiday schedule last week the rate dipped below fifty percent for the third time this year further reducing supplies. Best available estimates now put recovery of steel at the mid-point next year which means a lean first half with regard to supply of benzene, naphthalene, *et al.*

Pyridine price increase is apparently being adopted by all coal chemical producers and rather thankfully so. One source said that as far as he was concerned it was possible to "justify an even higher price" on the basis of crude supply and costs but at present the 71 cent tankcar price is becoming the standard. Spot became effective Nov. 16 and contract will become so January 1.

The change in terms for toluene to f.o.b. from a delivered basis by a major oil company is being carefully observed by cokeoven sources who have until Dec. 15 to make the decision to adopt the f.o.b. terms. Apparently it is thought prudent by most cokeoven people to watch what the balance of the petroleum industry does as their notification date of Dec. 1 approaches. Presumably the action of the oil companies in confirming or abstaining from the terms change will play an influential role in the eventual decision of coke oven suppliers.

In the current market supply conditions remain unchanged.

Benzene, phthalic anhydride, naphthalene and pyridine are tight. Styrene makers are expressing concern over the benzene shortage although their own production figures are well up over last year. Naphthalene supply is universally considered to be critical with hopes now pinned on the promised added supply from petroleum starting around the middle of next year. Phthalic, too, is restricted due to naphthalene with PA output figures for this year barely edging last year's totals. One bright note here is that a strike-bound Philadelphia plant is back in business and shipping material.

The American Iron and Steel Institute estimated steel production for the week ended November 27 would amount to 47.5 percent of theoretical capacity equivalent to 1,352,000 net tons of steel. Output in the previous week was 1,470,000 tons, 1,545,000 in the comparable week one month ago, and 2,540,000 tons during the corresponding week one year ago.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
117.64	117.64	118.29	118.45

For Current Prices see page 8

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended November 20, were as follows:

Ammonia liquor	lbs.	407,350
Ammonium sulfate	lbs.	17,131,334
Benzene	gals.	1,652,031
Coaltar	gals.	9,029,593
Crude chemical oil	gals.	284,023
Solvent naphtha	gals.	52,805
Toluene	gals.	369,632
Xylene	gals.	105,609

Basic Products

Cresylic Acid—Domestic US market conditions are relatively unchanged as firmness in supply features reports from the trade. Material is available for needs but sources are watching the steel situation with growing caution feeling that prolonged sluggishness will have adverse effect eventually on cresylic supply.

Production thus far this year is slightly ahead of last year's totals. In the first eight months of 1960 Tariff Commission reports indicate cresylic acid output at 38 million pounds as against 37.3 million pounds in the same period last year.

Export demand has soared this year. Census Bureau tallies show cresols and cresylic acid shipments to foreign countries through September to be 11.6 million pounds as compared to 5.8 million pounds last year in the same period. Reason for this increased flow of material is to be found in reduced cokeoven production overseas. Imports into the US on the other hand have dipped. ADF material arriving in the period January-September this year totals 1 million gallons as compared to 1.6 million gallons in the same period last year.

Naphthalene—The domestic supply situation remains tight. Sources have no hesitation in terming conditions as critical.

Cokeoven supplies were further restricted last week from already curtailed schedules by the Thanksgiving holiday. Steel rate dipped into the forties for the third time this year cutting into naphthalene supply accordingly.

As things stand now there doesn't seem to be any relief in sight until mid-1961. At that time it is expected industrial operations will pick up in general and steel in particular. Most opinions now hold that second half '61 is going to be far better than second half '60 or first half '61.

Another factor adding to the tight supply of naphthalene is the drastic reduction in imports this year. Through September of this year 30.3 million pounds were imported as compared with 48.5 million pounds in the same period in 1959. When it is considered that an average month's domestic production of naphthalene this year is 45 million pounds the loss in imports of 18.2 million pounds thus far this year is equivalent to 40 percent of one month's domestic production.

Almost all of the imported material has come from seven nations. Together with volume shipped through September they are:

United Kingdom—11,977,895 pounds.
Belgium—6,571,279 pounds.
Canada—5,120,670 pounds.
Netherlands—2,664,228 pounds.
Poland—964,513 pounds.
Union of South Africa—861,828 pounds.
W. Germany—677,215 pounds.

a-Picoline—Trade sources report supplies of this material adequate to meet contract needs. Little supply is being diverted to export, however, and volume for spot sales is reported limited.

Pyridine—Adoption of the recent 6c. a pound increase in the price of 2° pyridine comes hard on the heels of a critical supply situation which has plagued consumers and producers alike this year.

Despite higher production figures achieved in the first eight months of the year supply is nowhere near demand levels. In the period January-August this year 1,765,827 pounds of material was turned out as compared with 1,255,007 pounds in the same period last year.

Sources of imported material reveal

Coal Chemicals

that little help is to be expected from overseas producers in alleviating domestic US supply shortage.

The new terms effective on spot November 16 and to become effective for contract January 1 are:

Tanks, works, freight equalized, 71c. a pound.

Drums, carlots, same basis, 75½c. a pound.

Drums, less carlot quantities, same basis, 76c. a pound.

Toluene—The move by a major oil company in changing terms for toluene from a delivered basis to f.o.b. is being watched cautiously by cokeoven suppliers of the solvent.

The attitude currently is one of watchful waiting as the December 1 deadline approaches at which time petroleum producers must notify customers of a first of the year change in terms.

Cokeoven sources are therefore employing fabian tactics as they delay any decision to change their terms until it is clear that the rest of the petroleum concerns are going to follow the initiating company's lead.

Meanwhile, back at the marketplace supply of toluene is deemed firm by trade sources. Demand is on the ascendancy with interesting possibilities being displayed in plans to produce phenol from toluene.

Intermediates

6-Chloro-2-Nitrotoluene—Sources report material selling at 20½c. a pound, technical grade, in drums, freight allowed.

Diphenyl—Price is reported unchanged at 15¾c. per pound, tanks, works, 16¾c. per pound in 100-pound bags in truckload or carlot quantities, works, and in less than truckload or carlot quantities, same basis, 18½c. per pound.

One trade source reports that material is available in 260-pound fiber containers carrying a 1c. premium over above prices. Source notes, however, that almost all domestic material is carried in bags.

Maleic Acid—Sources say this material has fully returned to a competitive position after a long stand in the column of chemicals in tight supply.

No shortage now exists, observers report, and customers are able to obtain their needs promptly.

With maleic eased it is natural that fumaric has also come off the tight list. Reason for the easing is to be found not so much in increased supply as it is in decreased demand.

Sources report that scarcity of phthalic anhydride has cut demand for FA and MA in the resins field. Result is that both materials have returned to adequate supply.

m-Phenylenediamine—A major producer has added a larger quantity listing to its schedule.

Posting now reads:

Drums, in carlots or truckloads, freight allowed, $1.08 a pound.

In less than carlot or truckload quantities, same basis, $1.10 a pound.

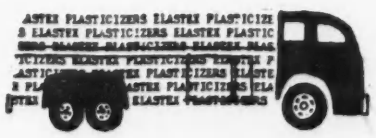
Phthalic Anhydride—A major producer has announced a 1c. across the board increase in the price of phthalic effective immediately on spot and January 1 in contract. New tankcar price is 19½c. a pound. This hike narrows the market spread from 4c. to 3c. with price ranging now from 19½c. to 22½c. a pound. Disclosed in the same announcement was the elimination of Detroit as an equilization point.

Styrene Monomer—Although production this year has taken giant strides ahead of 1959 some producers wish the benzene supply situation would ease up so that additional raw material would be available for added SM output.

One source stated last week that production capacity existed far in excess of the climbing demand curve so that the only problem is accessibility of benzene raw material.

Despite the difficulty in securing raw material producers have managed to turn out 1,183 million pounds of SM in the period January-August while last year in the same period 900 million pounds were produced.

Imports of SM in September registered 507,099 pounds valued at $61,967. All material originated in Canada and entered the US in the Detroit region.



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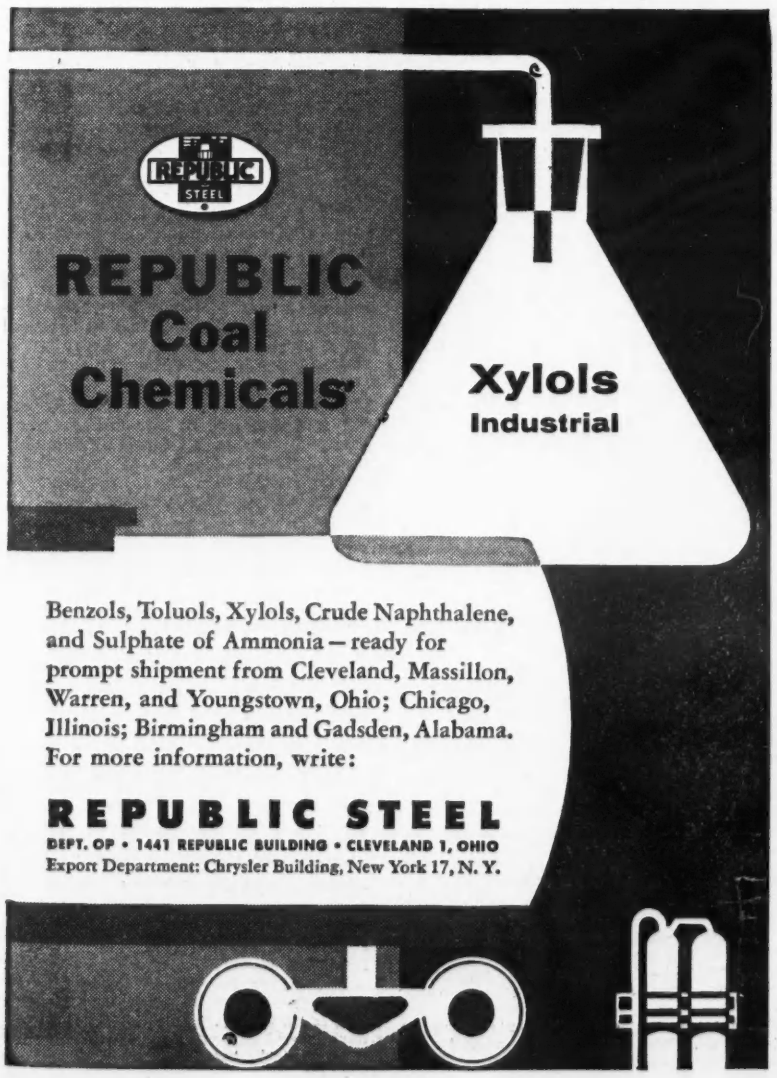
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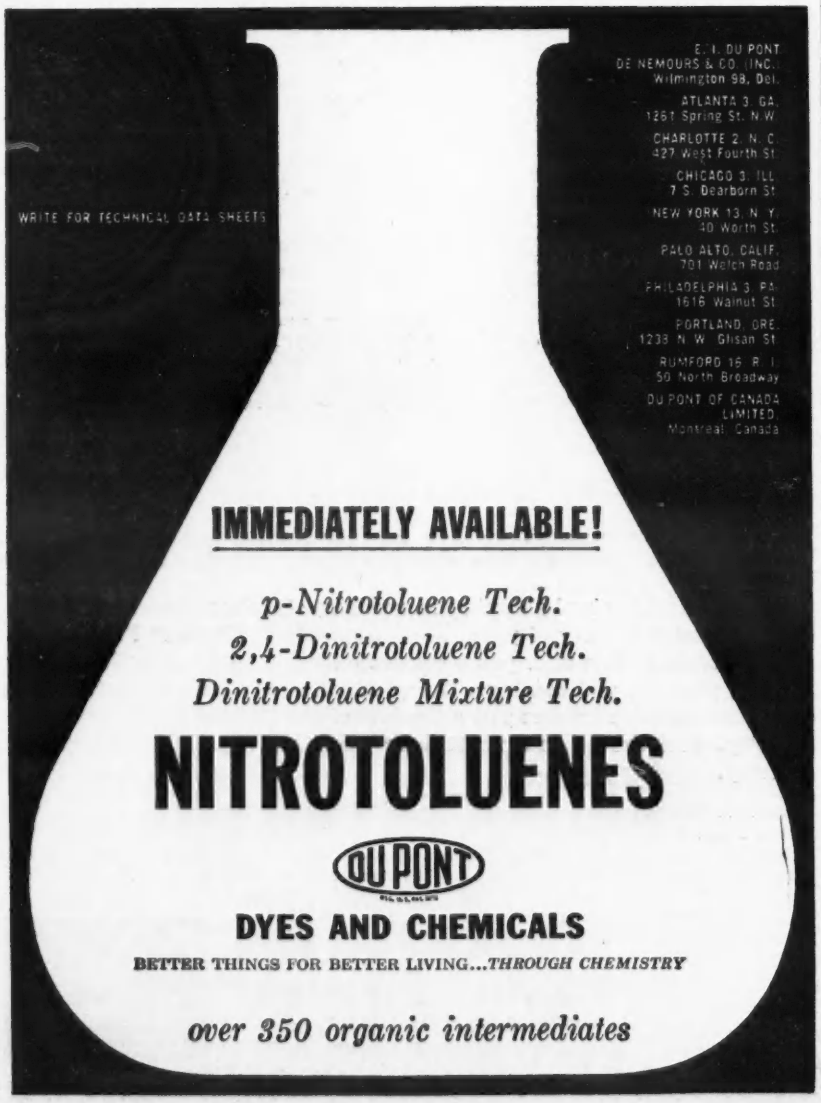
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Ansco Division Acquires Midwest Photo Paper Maker

General Aniline & Film Corporation has acquired the principal assets of Grant Photo Products, Inc., a midwestern manufacturer of industrial photographic papers. The move is expected to broaden participation of GAF's Ansco Division in the industrial market and strengthen its hand in meeting competition, a spokesman for GAF says.

Grant Photo has its offices and producing facilities for sensitized products in Cleveland, Ohio, and another plant for waterproofed photographic base paper stocks in Elyria, Ohio.

G. Peter Grant, jr., president of the acquired firm, will join Ansco as manager of industrial sales.

Chemical Trade Winds

—Continued from page 7

Bureau of Foreign Commerce in Washington.

The agency will provide information on credit ratings; lists of importers (trade lists) and basic data on local industries. The items listed below represent marketing possibilities, Commerce notes, not immediate offers to buy.

In compiling the list, Commerce has taken into consideration the relaxation of import and exchange controls in many countries, and has calculated the effect thi could have on chemical demand.

Here is the department's listing for chemicals and allied products:

ANGOLA—Insecticides, caustic soda, calcium carbide, ammonium sulfate, antibiotics, drugs, medicines.

ARGENTINA—Plastics materials.

AUSTRALIA—Plastics materials.

BRAZIL—Plastics materials, sodium hydroxide, potassium hydroxide, sodium bicarbonate.

BRITISH HONDURAS—Fertilizers; medicinal and pharmaceutical preparations; prepared paints, enamels, varnishes.

CEYLON—Inorganic and organic chemicals, pharmaceuticals, paints and varnishes, anticorrosives and rust preventatives, spray paints complete with sprayers, weedkillers, copper fungicides, insecticides and other pesticides, synthetic plastic wrapping and packaging materials.

CHILE—Sodium hydroxide.

COLUMBIA—Sodium hydroxide.

EL SALVADOR—Industrial chemicals, fertilizers, pharmaceuticals.

GERMANY, FEDERAL REPUBLIC OF—Cosmetics and other beauty aids, materials for raw plastics, industrial chemicals, non-wood flooring materials, floor wax, detergents, crude drugs, pharmaceutical raw materials, additives for newly-developed heavy chemicals.

HAITI—Pharmaceuticals, cosmetics, soap.

HONDURAS—Fertilizers.

HONG KONG—Cosmetics, including hair cream; formica sheets; polyethylene and other plastic raw materials; vinyl sheetings.

ICELAND—Pharmaceuticals, cosmetics, toilet articles, chemicals.

INDIA—Plastics materials, antibiotics.

INDONESIA—Fertilizer.

ISRAEL—Pharmaceuticals and raw materials, plastic raw materials, industrial chemicals, dyestuffs, naval stores, gums, resins, chemical specialties.

JAPAN—Phosphate rock, potash, sulfur, antibiotics for animal feeds, chemicals (especially new products).

JORDAN — Insecticides, drugs, cosmetics, paints and varnishes, rust inhibitors.

LIBYA—Medicines and pharmaceuticals, gun powder, fertilizers, paints and varnishes.

LUXEMBOURG—Toilet articles.

MALAYA—Lipsticks, rouges, powders, deodorants; medicines and pharmaceuticals, vitamins, lecithin, raw materials for paint, fertilizers, insecticides, and weedicides.

MEXICO—Calcium carbide, soda ash, sodium bicarbonate, sodium hydroxide, potassium.

NETHERLANDS—Cosmetics, deodorants, mascara, pharmaceuticals, raw plastics, chemical raw materials, fine chemicals, synthetic fibers.

NORWAY—Carbon tetrachloride, perchloroethylene, trichloroethylene.

PAKISTAN—Antibiotics.

PARAGUAY—Antibiotics, insecticides, automobile paints, fertilizers, cosmetics.

PERU—Nitrogenous fertilizers, insecticides, industrial chemicals, medicinals, antibiotics.

SOUTH AFRICA UNION OF—Pharmaceuticals, plastic materials.

UNITED ARAB REPUBLIC—EGYPT—Raw plastic materials, chemicals for rubber industry, pharmaceuticals, pigment, paints, varnishes, insecticides, industrial chemicals.

UNITED ARAB REPUBLIC—SYRIA—Drugs and pharmaceuticals, antibiotics, plastic materials, paints and varnishes, detergents, glucose, polyethelene fabrics, fatty acids, caustic soda, sodium carbonate.

URUGUAY—Argon and freon gases, antibiotics.

VENEZUELA—Calcium carbide, sodium bicarbonate, sodium hydroxide, potassium hydroxide.

VIET-NAM—Resins and pigments for paints, linseed oil, phosphate fertilizers, bulk insecticides and pesticides, sulfur, plastic raw materials, pharmaceuticals, detergents.

RESEARCH OPERATIONS CHIEF: Dr. Leo F. Peters, formerly a vice-president and associate director of Gulf Research & Development Company, Harmarville, Pa., who has been made vice-president and general admisistrator of the Gulf Oil Corporation research subsidiary.

Gibberellic Acid, Salt Win Additives Approval

Use of gibberellic acid and its potassium salt for increasing enzymatic activity of malt was approved last week by the Food & Drug Administration under the food additives law.

A petition for clearance of the chemical for this use had been filed with the agency by Eli Lilly & Co., Indianapolis, Ind.

FDA also approved a petition of Dow Chemical Company, Midland, Mich., to increase the amount of the food additive, ronnel, that may be mixed with feeds for control of cattle grubs.

Chemicals Sales: $28 Billion

—Continued from page 5

the eighty-seventh congress would be very similar to the eighty-sixth.

"The Presidency, of course, is another matter. Although Sen. Kennedy's slim popular majority may reduce any feelings that his colleagues might have had that they have been given a blank check, his leadership as the President can have great influence on the congress," Mr. Hull went on.

Another speech was presented by David H. Dawson, vice-president of E. I. duPont de Nemours & Co., Wilmington, Del. Pointing out that the chemical industry has obligations to the public, Mr. Dawson enumerated them thus.

Industry's Obligations Cited

"First we must act as responsible citizens of the community, and be at least a little ahead of public demands in such matters as air and water pollution abatement; the provisions of means for, and education on, the safe handling of our products, inevitably involved at times with danger; and in the maintenance of safe working conditions on our plants.

"Second, we have an obligation to create a clear and accurate public image of our industry, and of our individual companies as part of it. Hopefully it will be a favorable image, but the foremost requirement is that it be clear and accurate," Mr. Dawson went on.

Third Obligation—High Standards

A third obligation is to maintain high standards of ethical conduct, both corporately and on the part of our individual employees.

"The fourth obligation is to speak our mind—depending on facts, and not in our own self-interest exclusively, but when we have convictions, to state them, explain them and defend them.

"The last of the responsibilities we have to the public is owed as well to each of our other groups—stockholders, employees, and customers—and that is to earn a profit." The duPont executive conclude.

Polypropylene Fibers

—Continued from page 5

yarns. The availability of the new production facilities will enable us to speed up the development of these new potential markets," the new manager pointed out.

Mr. Evans has been assistant general manager of the company's Virginia Cellulose department since 1952, and has a background of experience in research and plant management as well as administration.

Current Market Quotations

—Continued from page 28

Yeast, brewers, primary, USP XV, 150 mcg. B^1 per gram, 100-lb. dms. lb. .47 - —
USP XV, 270 mcg., B_1 per gram, 100-lb. dms. lb. .52 - —
USP XV, 300 mcg., B_1 per gram, 100-lb. dms. lb. .56 - —
USP XV, 900 mcg., B_1 per gram, 100-lb. dms. lb. .60 - —
Torula, USP, dlvd. lb. .18 - —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls. lb. .40 - .45
Ylang-ylang oil, Bourbon, bots. lb. 7.00 -22.00
Ylang Ylang oil, Bourbon, extra bots. lb. 24.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd lb. .343 - —
bgs., smaller lots, dlvd lb. .373 - —
Zinc acetate, NF, VIII, dms. lb. .53 - —
Tech., dms., l.t.l., works lb. .29¾- —
Zinc borate, bgs., 1,000 lbs or more, works lb. .25 - —
bgs., less than 1,000 lbs., same basis lb. .27 - —
Zinc chloride, NF, gran., dms. lb. .42 - —
NF, precip., powd., dms. lb. .26 - —
Tech., soln., 50%, dms., c.l., works 100 lbs. 5.80 - —
dms., l.c.l., works 100 lbs. 6.40 - —
tanks, works 100 lbs. 5.15 - —
fused, dms., c.l., works 100 lbs. 10.70 - —
dms., l.c.l., works 100 lbs. 11.20 - —
gran., fib. dms., c.l., works, 100 lbs. 11.45 - —
fib. dms., l.c.l., works 100 lbs. 11.95 - —
Zinc chromate bbls., dlvd. lb. .29 - —
Basic bbls., dlvd. lb. .34 - —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 - —
dms., smaller lots, works lb. .57 - —
Zinc dust coml. bbls., c.l., works, lb. .17 - —
Pigment, bbls., c.l., works lb. .16½- —
bbls., l.c.l., works lb. .18¼- —

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WE LIST THE FOLLOWING AS EXAMPLES OF OUR EXTENSIVE PRODUCT RANGE.

AMIDOL
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p-AMINOPHENOL
4-AMINO-2-NITROPHENOL
7-ANILINO-1-NAPHTHOL-3-SULFONIC ACID
4-CHLORO-2-AMINO ANISOLE
o-CHLORANILINE
p-CHLOR-o-NITRANILINE
4-CHLOR-2-NITRO ANISOLE
4,4'-DIAMINO-DIPHENYLAMINE-2-SULFONIC ACID
2,4-DIAMINOANISOLE
2,5-DICHLORANILINE
2,5 DICHLORNITROBENZENE
ETHYL p-TOLUENE SULFONATE
o-FORMYL BENZENE SULFONIC ACID
6,6'-IMINO BIS-(1-NAPHTHOL 3-SULFONIC ACID)
3-METHYL-1-(2,5-DICHLORO SULFANILIC)-5-PYRAZOLONE
3-METHYL-1-PHENYL-5-PYRAZOLONE
3-METHYL-1-(4-SULFO PHENYL)-5-PYRAZOLONE
3-METHYL-1-(3-SULFO PHENYL)-5-PYRAZOLONE
METHYL p-TOLUENE SULFONATE
5-NITRO-2-AMINO PHENOL
5-OXO-1-PHENYL-2-PYRAZOLINE-3-CARBOXYLIC ACID ETHYL ESTER
5-OXO-1-(p-SULFO PHENYL)-2-PYRAZOLINE-3-CARBOXYLIC ACID
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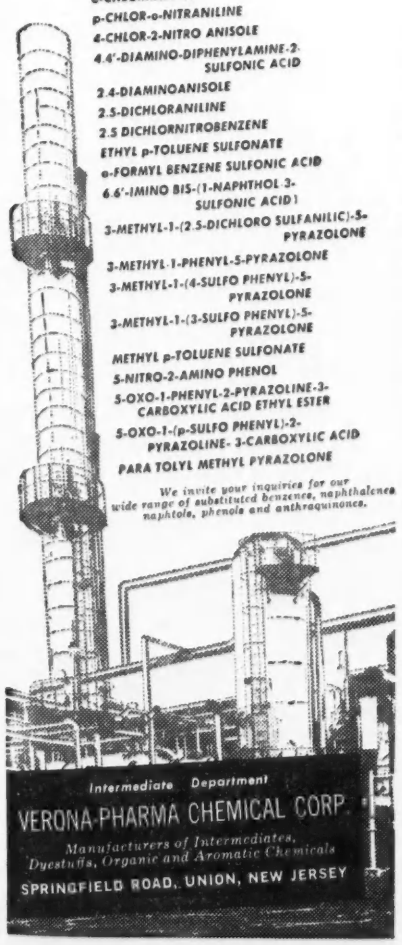

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Zinc fluoride, bbls., works lb. .49 - .50
Zinc hydrosulfite, dms., c.l., frt. alld. lb. .21¼- —
dms., l.c.l., frt. alld. lb. .23½- —
Zinc metal prime western, slabs, E. St. Louis lb .13 - —
Prime western slabs, New York, lb. .13½- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld. lb. .27 - —
10% Zn., dms., frt. alld. lb. .33 - —
Zinc nitrate, tech., cryst., bbls., works lb. .20 - —
Zinc oxide, pigment, American process, lead-free bgs., c.l., frt. alld. lb .14¼- —
bgs., l.c.l., 10 tons or more, same basis lb. .15 - —
bgs., l.c.l., smaller lots, same basis lb. .15½- —
Zinc oxide, leaded, 35% bgs., c.l., mills, frt. alld. lb. .15⅜- —
bgs., l.c.l., 10 tons or more, same basis lb. .15⅞- —
50%, bgs., c.l., same basis lb. .15¾- —
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis, lb. .16¼- —
French process, green seal, bgs., c.l., mills, frt alld lb. .16¼- —
bgs., l.c.l., 10 tons or more, same basis lb. 16¾- —
Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis lb. .17¼- —
red seal, bgs., c.l. same basis, lb. .15¾- —
Zinc oxide, French process, green seal, bgs., l.c.l., 10 tons or more, same basis lb. .16¼- —
bgs., l.c.l., smaller lots, same basis lb. 16¾- —
Zinc oxide, white seal, bgs., c.l., same basis lb. .16¾- —
bgs., l.c.l., 10 tons or more, same basis lb .17¼- —
bgs., l.c.l., smaller lots, same basis lb .17¾- —
Zinc oxide, USP dms., c.l., frt. alld. lb. .18¼- —
dms., l.c.l., 10 tons or more, same basis lb .18¾- —
dms., l.c.l., smaller lots, same basis lb. .19¼- —
Zinc phenolsulfonate, NF, gran., dms lb. .45 - .46
NF, powd., dms. lb. .48 - .49
Zinc resinate, precip. 7.2-7.6% Zn., dms., frt. alld. lb. .45 - —
Zinc silicofluoride dms. works lb. .12½- .14
Zinc stearate, USP, ctns., c.l. lb. .41 - —
lb. .41 - —
ctns., l.c.l. lb. .42 - .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E. 100 lbs. 8.75 - —
bgs., l.c.l., dlvd. E 100 lbs. 9.75 - —
Zinc sulfate in bbls 40c. higher.
Zinc sulfide, pure, bgs., c.l., dlvd lb. .2530- —
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works lb. 2.04 - —
Zinc, yellow (see Zinc chromate).
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 10.25 - —
bbls., c.l., works 100 lbs. 10.85 - —
bbls., l.c.l., works 100 lbs. 11.35 - —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld lb. .26 - —
Normal, 250-lb. dms., frt. alld. lb. .55 - —
Zircon (G) gran., bgs., c.l., works, lb. .03⅛- —
Zircon (G) gran., bgs., 5 tons to c.l., works lb. .03⅜- —
bgs., 1 ton to 9,999-lb. lots, works lb. .04 - —
bgs., smaller lots, works lb. .06½- —
Zircon (G) milled, bgs., c.l., works, lb. .04⅛- —
bgs., 5 tons to c.l., works lb. .04⅜- —
bgs., 1 ton to 9,999-lb. lots, works lb. .04⅝- —
bgs., 500-1,999-lb. lots, works lb. .07½- —
Zircon (G) in barrels 1c. higher.
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works lb. .23 - —
Zirconium hydride, powd. electronic grade, dms., works lb. 14.00 -15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works lb. 1.50 - —
Electric-fused lump, bgs., 500 to 1,999-lb. lots, works lb. .48½- —
bgs., smaller lots, works lb. .51 - —
milled, bgs., c.l., works lb. .62 - —
bgs., 5-ton lots, works lb. .62½- —
bgs., 1-ton to 9,999-lb. lots, works lb. .63½- —
bgs., 500 to 1,999-lb. lots, works lb. .64 - —
bgs., smaller lots, works lb. .66 - —
Zirconium Oxide,
Glass polishing grade, 94-97% ZrO_2, bgs., works lb. .55 - .65
Opacifier grade, 85-90% ZrO_2, bgs., lb. .27 - .50
Stabilized oxide, 91% ZrO_2, milled, bgs lb. .62 - .65
Zirconium oxychloride, cryst., ctns., 5-ton lots, works lb. .37½- —

Bids Wanted

Ammonium Sulfate, 200 tons. Bid IFB AIV 41-014-61-42-B, Dec. 19. Purchasing and Contracting Officer, Fort Bliss, Texas.

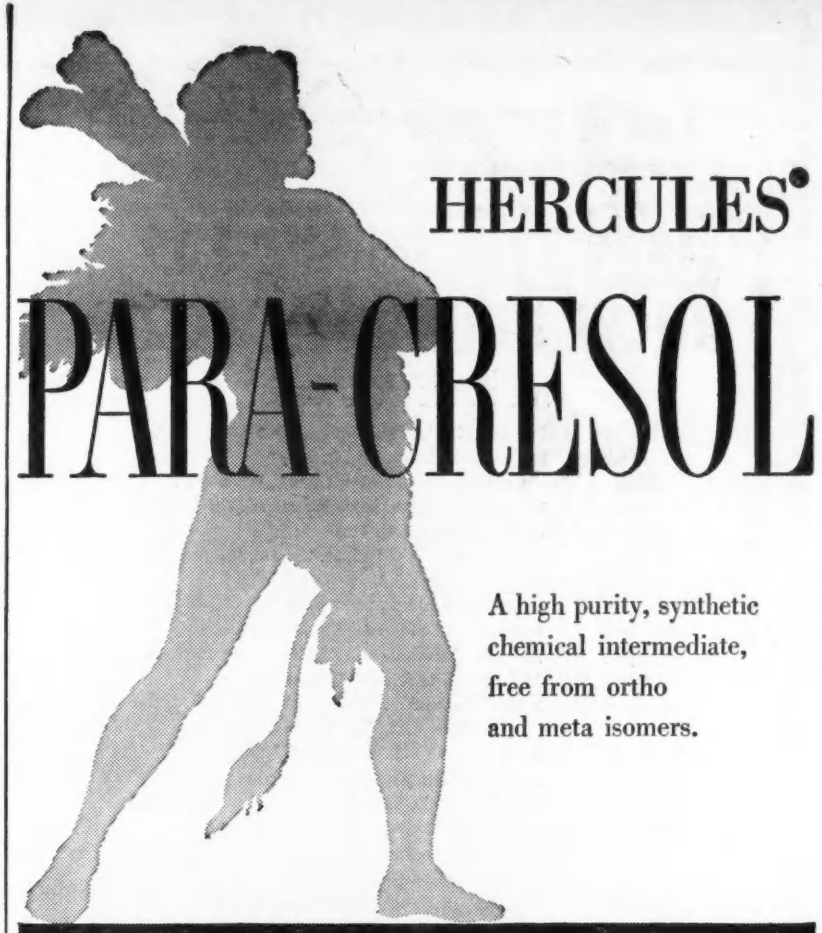
Carbon Dioxide, technical, 99.5 percent minimum assemble as carbon dioxide, liquid form. Fed. Spec. BB-C-101, FSN 6830-244-6806, grade B, type II, class 2, 312,000 lbs. Bid IFB 22-601-23B, December 16. Base Procurement Office, Greenville Air Force Base, Miss.

Coating Compound, 200 kits. Spec. MIL-P-21563 (WEP) Amend. 1 (QPL). Bid IFB-155-1433-61B, Dec. 15. General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Drugs, Meprobamate Tablets, USP, 0.4 gm., 500s, 79,824 bots. Bid RFQ 7944Q, Dec. 1.; **Nitrofurantoin Tablets,** USP, 100mg. (1-1½ gm.), 100s, 19,584 bots. Bid RFQ 7946Q, Dec. 1; **Tetracycline Hydrochloride Tablets,** NF, 0.25 gm., 100s, 91,440 bots. Bid RFQ 7949, Dec. 1. Military Medical Supply Agency, 3rd Ave. and 29th St., Brooklyn 32, N. Y.

Lacquer, Spec. MIL-L-19537A, 9,402 gals. Bid IFB-155-1484-61B, Dec. 6. Availability of specs. and drawings and spec. exceptions are available from the Naval Supply Depot, Attn.: Code CDI, Building 26, 5807 Tabor Rd., Philadelphia 20, Pa., General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Tetrafluorodichloroethane, in tank cars, approximately 690,000 lbs. Bid IFB 151-61-202, Dec. 6. Requirements are annual. US Atomic Energy Commission, Paducah, Ky.



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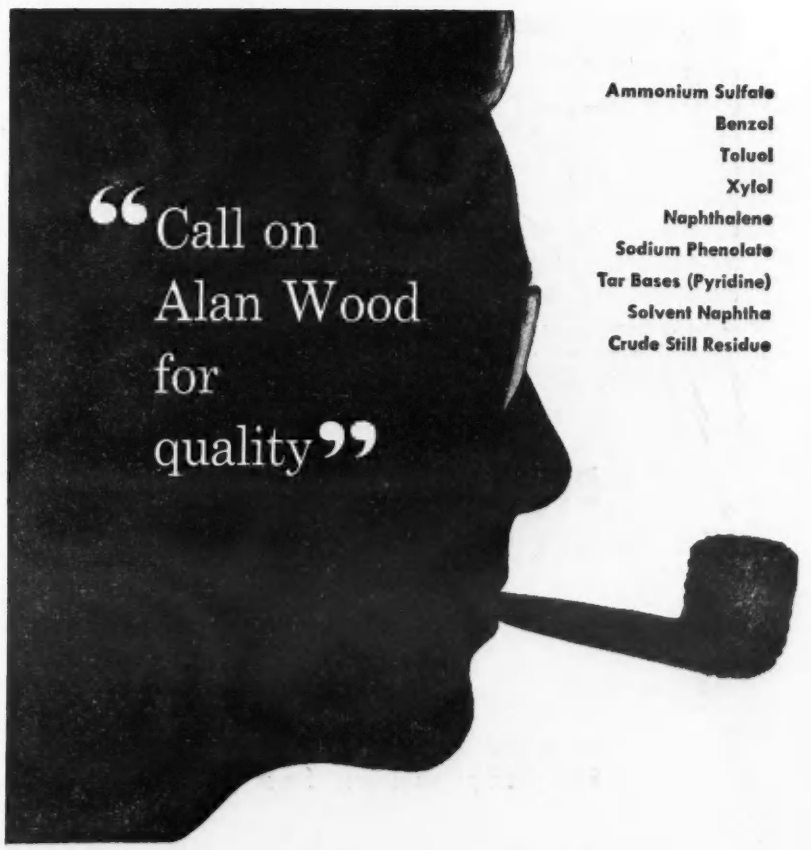

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MEXICO:	Productos Roche S.A., Mexico 12, D.F.
SOUTH AFRICA:	Roche Products (Pty) Ltd., Johannesburg
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Drugs, Fine Chemicals

Demand for drugs and fine chemicals is generally good but price weakness still persists, especially among vitamins and antibiotics. In both areas, it's understood, trading levels vary with spot conditions and are quite frequently below official list. A case in point is nicotinamide. While some sales are being made at $6.50 a kilo, the large-lot price established last summer, other sales are being made today at $5.75. Competition—particularly that posed by foreign material, reported to be selling at $5.90 a kilo as far back as last August—is said to explain the rather broad range.

The one-price market is getting less and less common. This is understandable because competition is not equally intensive throughout the country. On the east and west coasts where there's a preponderance of foreign goods, of lower cost, available business is naturally most competitive, leading to continual price weakness.

In addition, several drug and fine chemical makers are following a more aggressive tack these days and chopping prices to discourage an increase in imports, which frequently occurs in the fall as domestic demands climb. Two such changes recently noted were the sharp reductions in vitamin B_{12} products and ascorbic acid.

Revised by a major manufacturer November 1, prices for methylene blue crystals are now set at $4.67 a apound for 100 pounds; at $4.82 for 50 pounds, and at $5.02 for a minimum shipment of 25 pounds. The chemical is a weak antiseptic and possesses some bacteriostatic activity.

Although the "mild business recession" has made many purchasers of drugs reluctant to purchase in advance of actual needs, it has helped not hurt aspirin sales. Bulk manufacturers report very active buying though they indicate that sales have yet to reach the high of recession-ridden 1958. Maybe things aren't so bad after all.

Ascorbic Acid—Domestic manufacturers dropped prices for ascorbic acid 55c. a kilo, November 7. Unexpected in some quarters, the action established a schedule of $6.80 a kilo for 100-kilo lots and $7.05 for lesser quantities.

Reduced simultaneously and now quoted at the same levels were prices for sodium ascorbate. Unchanged: calcium ascorbate.

The threat of an increasing volume of lower-cost imported vitamin probably explains the price reductions. In the past year, drug firms have become decidedly more aggressive in meeting this competition which frequently increases as demand rises seasonally here.

Although profit margins are narrowed, sales volume currently is running at a good level. Increasing quantities of the vitamin are going into foods and beverages, and, based on random observations and conversations, the layman is becoming convinced of the value of taking "massive doses" of vitamin C to ward off or get rid of pesty colds. There's been considerable publicity along these lines and higher sales could result.

Menthol—Reports from the trade last week indicated that the spot market for Brazilian market has weakened—although not to any appreciable extent. In the long range, however, it was said, the trend will be up since demands, particularly from the cigarette makers are rising.

Imports of natural menthol in September totaled 59,971 pounds and were valued at $365.082 and dutied at $20,991. Shippers were: Brazil 26,418 pounds, valued at $141,158; Taiwan 22,020 pounds, valued at $155,052; Spain 7,717 pounds, valued at $54,763; Australia 3,516 pounds, valued at $11,034; and Japan 300 pounds, valued at $3,075.

The same month, synthetic menthol was imported from France and West Germany. Of the total shipment of 4,179 pounds, which was valued at $24,163 and dutied at $1,462, France supplied 3,349 pounds, valued at $21,545 and dutied at $1,172, and West Germany, the remainder.

Methionine — The market is reported quite stable. A positive influence was Food & Drug Administration's recent announcement that dl-methionine may be included in dietary supplements in amounts of up to 200 milligrams a day.

The agency's ruling will be effective until March 6, 1961, or until regulations are issued establishing tolerances for dl-methionine or exemption from the requirement of tolerances is granted.

An essential, sulfur-bearing amino acid, dl-methionine is used in dietary supplements along with vitamin preparations. It has also been used as an ingredient in cosmetics and skin applications, and for pharmaceutical and animal feed purposes since 1946.

Prices range from $1.43 a pound for feed-grade to $3.50 a pound for pharmaceutical grade material.

Methylene Blue—Revised by a major manufacturer November 1, prices for methylene blue crystals are now established at $4.67 a pound for 100 pounds; at $4.82 for 50 pounds, and at $5.02 for a minimum shipment of 25 pounds.

Methylene blue (methylthionine chloride) is a weak antiseptic, possessing some bacteriostatic activity. It has value as an antidote to cyanide poisoning and has been successfully used in treatment of methemoglobinemia.

In recent years, the crystalline product has been favored over the powder because of its freedom from dusting tendency.

Nicotinamide—As in several areas of the drug and fine chemicals business, nicotinamide is not a one-price market. Competitive factors explain the situation; influence of imported material, for example, has weakened trading prices in isolated instances.

To reflect the spotty market, OPD is currently carrying a range of $5.75 to $6.50 a pound for 100-kilo lots. The low price, only recently reported, is not indicative of demand which continues quite strong.

Streptomycin—US output of streptomycin rose from 11,354,673 grams in July to 25,906,991 grams in August, but this was still below the all-time high of 30.6 million in May.

Partially responsible for the high rate of production is overseas demand which amounted to 7½ million grams in August and close to 5 million grams in September.

Much of the strep and DHS exported this year has gone to India because of the high incidence of tuberculosis there and the efforts being made to wipe it out.

The Commerce department also notes that WHO experts have been collaborating with the government of West Pakistan's health department in a survey of incidence of TB in that country. About 3 percent of the population there, it was found, suffers from the disease with the annual death rate over 200 per 100,000 (the US rate 60 or so years ago).

Sulfa Drugs — Reviewing the market situation and in the process, trend spotting, Business & Defense Services Administration notes a rise in domestic production of sulfa drugs, a decline in exports of the older products and a rise in exports of the more newly-developed.

January-May output, BDSA says, amounted to 2.4 million pounds, up 10 percent from the comparable period in 1959, an increase that could have resulted from demand for the newer sulfanamides. At the same time, the Commerce department agency adds, exports of the recently developed drugs in the class rose 17 percent over the '59 figure, while exports of two old stand-bys, sulfathiazole and sulfadiazine, declined.

Approximately 14 percent of sulfa drug production during the first five months of this year was exported, chiefly to Canada, Hong Kong, Panama, and Switzerland.

US imports of many sulfa drugs increased sharply in 1959 over 1958, indicating the availability of these products in other countries, which may or may not have the rights to manufacture them.

Following are major US imports of sulfonamides in 1959 (1958 figure in parenthesis):

Sulfacetamide 3,306 pounds (551); sulfadiazine 20,633 (16,274); sulfaguanidine 58,834 (11,794); sulfanilamide 324,250 (297,448); sulfapyridine 3,638 (4,077); sul-

Price Trends

Advanced

None

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
59.27	59.27	59.78	60.23

For Current Prices see page 8

Drugs, Fine Chemicals

famerazine 14,218 (4,234); sulfathiazole 128,527 (220); sulfamethazine 9,255 (3,140).

Tartrates — Imports of tartaric acid dropped from 404,171 pounds in August to 209,013 pounds in September. Total value of this material, according to Census bureau reckoning, was $69,218, the duty, $12,540.

Heading the suppliers' roster, as usual, was Spain, which accounted for shipments of 155,000 pounds, carrying a value of $51,898 and a duty of $9,300. France shipped 27,558 pounds (valued at $9,039 and dutied at $1,653) and Italy the remainder.

Cream of tartar imports in September were 223,524 pounds, down from 269,092 in August. Valued at $60,481 and dutied at $6,892, this material arrived here from: United Kingdom, 155,000 pounds, valued at $44,076, and dutied at $4,843; Italy, 57,501 pounds, valued at $14,405 and dutied at $1,795; and Spain, 11,023 pounds, valued at $2,000 and dutied at $344.

Imports of tartar emetic (potassium antimony tartrate), all from West Germany, amounted to 2,202 pounds and were valued at $1,164 and dutied at $132.

Botanicals

Activity in botanical markets during the holiday week was about routine for the season. Price fluctuations were uncommon, as has been the case this fall. For domestic botanicals the trend to higher prices was noted, however, as dealers' stock declined.

Locut Bean Gum—US imports of locust bean gum in May were 1,096,155 pounds, higher than in any previous month this year. All-told, however, imports during the five-month period were 24.6 percent less than those of the corresponding period in 1959.

Shipments in May, at a combined value of $241,000, arrived here from: Spain 341,823 pounds; Italy 285,507 pounds; Portugal 144,715 pounds; Greece 147,710 pounds; Netherlands 114,800 pounds; United Kingdom 50,400 pounds; and Switzerland 11,200 pounds.

Tragacanth Gum—Running counter to the overall trend in imports of water soluble gums, imports of tragacanth for the first five months of 1960 were up 49 percent from the comparable period in 1959, at 812,000 pounds.

Shipments of the gum in May totaled 240,000 pounds and were valued at $172,000. Most of this material, as in previous months, came from Iran. Other shippers included India, which was out of the picture completely in 1959, and the United Kingdom, whose May shipments were more than triple those of the previous year.

Obituaries

Franklin Farley

Franklin Farley, former president of the Chlor-Alkali Division of Food, Machinery & Chemical Corporation, died November 24 in Lakeland, Fla. He was sixty-six years old.

Mr. Farley once served with Arthur D. Little, Inc., Cambridge, Mass. Later he was vice-president of Phosphate Mining Company, New York, and vice-president of International Minerals & Chemicals Corporation, Chicago.

Mr. Farley joined FMC in 1954 and served the company as a management consultant and as president of the Chlor-Alkali Division. He retired in September.

William J. Kerin

William J. Kerin, former president of Stanley Chemical Company, East Berlin, Conn., died November 20 in New Britain, Conn. He was seventy years old.

Mr. Kerin retired in 1956, after serving fifty years with the company.

August Kochs

August Kochs, founder of Victor Chemical Works, Chicago, died last week in that city. He was eighty-nine years old.

At the time of his death, Mr. Kochs was also vice-chairman of the board of directors of Stauffer Chemical Company, which acquired Victor in 1959.

Ralph Booth, president of Jackson & Moreland, Boston, Mass., consulting engineers, died November 21 in Boston. He was sixty-one years old.

William R. Goudy, retired general credit manager of Union Carbide Corporation, died November 17 in Glen Ridge, N. J. He was eighty-eight years old.

John A. Knowlton, retired manager of economics in the marketing department of the New York city headquarters of Standard Oil Company (New Jersey), died November 21 in New York. He was sixty-six years old.

Louis L. Stephens, former general counsel and director of Standard Oil Company of Indiana, died November 18 in Pierre, S. D. His age was eighty-five.

Parke-Davis, Japanese Firm

—Continued from page 3

cording to a joint announcement of the two firms, who have been closely associated for some fifty-two years. Ownership of the new subsidiary is 50-50.

A wide range of Parke-Davis antibiotics, vitamins, hormones and steroids will be manufactured by the company for distribution in Japan.

Management will be mainly in the hands of Sankyo, and the firm will be staffed with Japanese nationals. Parke-Davis will supply technical assistance, patents, trademarks and manufacturing specifications.

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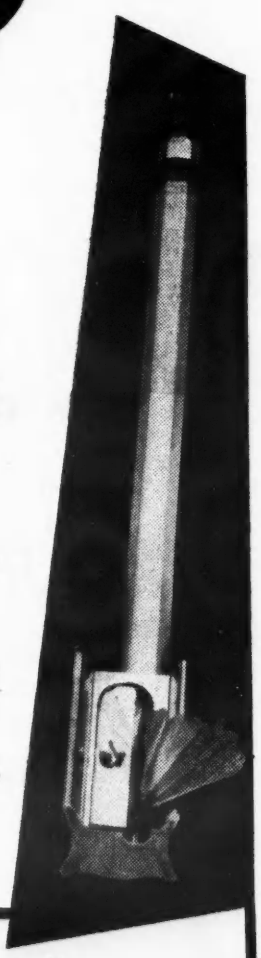

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Warwick Wax Division Has New White Microcrystalline

Western Petrochemical Corporation's Warwick Wax Division has started commercial production of new, pure white, high melting microcrystalline wax—said to be the first such product available at competitive prices.

Commercial output of the material has been made possible by a recently-completed expansion and modernization program at the division's Chanute, Kan., refinery.

Identified as "White Mekon," the wax is said to impart marked improvements to such end-products as polishes, both liquid and solid solvent types, plastics for extrusion as well as coatings for papers and boards.

Chemical, Drug Block

—Continued from page 3

for Reciprocity and the Tariff Commission to submit written comments or present oral testimony on the listed products at public hearings to be held January 5. Persons wishing to testify should give advance notice to the CRI and the commission by December 27 and file a copy of their statement.

The new list supplements the list of approximately 2,500 items issued last May by the State department as products that may be used by the US for tariff bargaining purposes at the GATT meeting.

Under the 1958 amendments to the trade agreements law, the President's authority to negotiate new trade agreements was extended until June 30, 1962. The amendments authorized the President to reduce tariff duties in stages by any one of three alternative methods:

- Reducing the rate existing on July 1, 1958, by not more than 20 percent with not more than 10 percent of the reduction taking place in one year.
- Reducing the rate existing on July 1, 1958, by not more than 2 percentage points ad valorem with the reduction not to exceed 1 percentage point in any one year.
- Reducing to 50 percent ad valorem or its equivalent any rate which is in excess of that level, provided not more than one-third of the total reduction occurs in any one year.

Chemical industry items on the supplemental list involve thirteen paragraphs of the chemical schedule of the 1930 tariff law plus nine other paragraphs in schedule 16, the so-called free list.

Items on the List

Chemical items on the list are:

Chloroacetic acid and oxalic acid (para 1); all medicinal preparations, nspf (except derivatives of barbituric acid, ergot derivatives, vitamins), tellurium and tellurium compounds, and pentaerythritol (para 5 and 23); alumina, when imported for producing aluminum (para-6); ammonium phosphate (para 7); certain chalks or whitings (para 20).

Medicinal compounds, preparations, mixtures, and salts, flavoring extracts and natural or synthetic fruit flavors, fruit esters, oils and acids, all the foregoing their combinations containing not more than 50 percent of alcohol (para 24); diethyl barbituric acid and salts and compounds (para 26); methyl cellulose in any form (para 31(b12)); digitalis (para 36); bay rum or bay water whether distilled or compounded (para 62); potassium carbonate (para 78); and sodium chloride or salt in bulk (para 81).

Chemical items on the free list involved in the negotiations are calcium nitrate; naphthalene from which the removal of all water present has a solidifying point less than 79 degrees centigrade; dead or creosote oil; certain drugs of vegetable origin in their natural and uncompounded state; guano; calcined magnesium sulfate and mixtures of a grade used chiefly for fertilizers; ilmenite and ilmenite sands; lemongrass; lignalole or bois de rose; rosemary; spike lavender; thyme; potassium nitrate or saltpeter in crude form; and anise.

MERCK MEDICAL DIRECTOR: Dr. F. Douglas Lawrason, dean of the University of Arkansas Medical School, who has been named executive medical director of Merck & Co., Rahway, N.J.

Heyden Newport Units Move To Increase Western Sales

In a move to strengthen sales coverage in the western states, Heyden Chemical Division and Nuodex Products Division of Heyden Newport Chemical Corporation have made two promotions in their combined Los Angeles office.

Knox Price has been named general manager of Nuodex Products in California. He will be responsible for an expanded sales effort, and for making necessary additions to the sales staff.

Earl P. Hanson, formerly regional representative for both divisions, has been elevated to district manager for the Heyden Chemical Division.

In another personnel change, Lawrence Samler has been named manager of Nuodex Products' Long Beach, Calif., plant.

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Coatings Materials

—Continued from page 39

to asbestos paper products. Listings continue at their long-established positions, unchanged. Supplies of fibres are reported to be fully available.

Miscellaneous

Casein—Market for casein held to the routine pace set over the past few months. Listings for Argentine are reported to be unchanged with some seasonal build-up of supplies in process in the Argentine. Dealers stocks are said to be closely held.

On December 16, lower tariffs will go into effect on Polish goods entering this country. The President ruled the Polish shipments to the US could enjoy most-favored-nation tariff rates. Polish casein already enjoys duty-free status, but members in the trade view the President's move as a friendly gesture which should improve trade relations with Poland.

Trade sources report that the latest listing for Polish casein is about the same as Argentine, perhaps slightly lower. Argentine is said to be in the range of 17¾ cents per pound to 18¼c., depending on position. Offerings of Australian were reported to be very limited. Spot lots commanded prices in the range of 23 cents per pound, while shipments, when offered, were in the range of 22c. to 21½c. per pound.

Naval Stores

Production of gum naval stores during October was reported at 12,560 barrels of turpentine and 38,880 drums of rosin, up 32 percent from the same month a year ago, according to the Crop Reporting Board.

For the first seven months of the crop year, production was 14 percent more than the same period last year. Wood turpentine production at 41,170 barrels, was down 7 percent from October of last year, with production to date this season 6 percent less than that for the corresponding period last year.

October production of steam distilled and tall oil rosin was reported at 103,660 and 39,190 barrels, respectively. Wood turpentine stocks on October 31, 1960, at 133,110 barrels, were down 8,550 barrels from a month ago and more than offset the increase in stocks of gum turpentine.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Nov. 18	Mon. Nov. 21	Tues. Nov. 22	Wed. Nov. 23	Thurs. Nov. 24
Drums—					
WW	...	...	...	$17.10	...
Bags—					
Tankcars (for week ended Nov. 25)—					
Sales, USDA	...	[1]	...	...	...

(Per 100 lbs., c.l., Friday)
K-M, $17.75; N, $17.85; WG, $18.16; WW, $18.25

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	...	...	...	...	...
Sales	...	...	...	...	...	...

[1] Carlots. [2] Export.

FD&C Red No. 1

—Continued from page 3

as to the safety of this certified color (OPD, 11/21/60).

Dr. Arnold J. Lehman, chief of the FDA division of pharmacology, remarked to the group that there was some reason to believe from the tests that the color might be classed as a carcinogen, which touched off heated protests from the three producers of the dye, against officials rendering judgments on the basis of incomplete evidence.

Mr. Harvey said last week as he signed the delisting order that the test results do not provide a basis for concluding that the color could cause cancer, but he added that these tests will be continued.

FDA is immediately discontnuing certification of any further batches of this color and is cancelling outstanding certificates for all previously-certified lots.

According to the delisting order, "the Commissioner of Food and Drugs, having concluded that ingestion of this color additive over a long period of time would be unsafe, and in order to protect the public health, hereby terminates the provisional listing of FD&C Red No. 1 for use in foods, drugs and cosmetics."

At the same time the commissioner found "that no action needs to be taken to remove foods, drugs and cosmetics containing this color additive from the market on the basis of the scientific evidence before him, taking into account that the additive is not an acute toxic substance and that it is only used in small amounts in foods, drugs and cosmetics."

Principal use of this coaltar dye has been in the production of maraschino cherries and sausage casings. FDA said that the lowest amounts of Red No. 1 which have been shown to produce liver damage in test animals were many times greater than the amount of this color that would be consumed in the human diet. There have been no limits on the amount of Red No. 1 that could be used in foods but in actual practice the amounts have been small, even where Red No. 1 was the sole coloring agent.

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Essential Oils, Aromatics

Unusual firmness was again noted among the essential oils. Four items advanced and none declined. Those that advanced are cedarwood, 10 cents per pound; chenopodium, 20 cents per pound, Java-type citronella, 9 cents per pound and spearmint 40 cents per pound. Reported to be quite firm were such items as ocotea cymbarum and peppermint. The vanilla bean market is marking time with sales said to be slow. Prices remained substantially the same as they have been for the past few weeks with Bourbon material weakening a bit.

The following information, about 1959 production of pepper, is from the US Department of Agriculture:

The year was important for pepper. Prices which had fallen every year since 1951 began to rise; Indonesia's crop was much larger than earlier expected. The fact that the total amount of pepper that enters world trade is relatively small means that this commodity is a rather speculative one.

World production during 1959 is estimated at 177.4 million pounds, up 10.3 million pounds from the revised 1958 total and only slightly smaller than production during 1956 and 1957 of 179.2 and 177.5 million pounds, respectively. During 1959 Indonesia regained its prewar position as the largest producer and exporter from India, who had been the largest postwar producer.

In Sarawak, production during 1959 declined for the third consecutive year. Other producing areas showed little change from the 1958 level.

One of the drug companies has donated $75,000 worth of hypo-allergic cosmetics to the New Jersey Association for Mental Health, according to Mrs. James Chiara, Mental Hospitals Committee Chairman.

The idea, says Mrs. Chiara, is to help women patients develop a renewed interest in their personal appearance, which is thought to be an important step in rehabilitation.

Also, better groomed patients improve the public's impression of mental patients, thereby setrengthening the partnership between the mental hospital and the community, Mrs. Chiara says.

Essential Oils

Cedarwood—The market has firmed considerably. From its previous listing, 70c. per pound, cedarwood oil has advanced to 80c. per pound.

Citronella—Java-type material (from Formosa) has risen from its previous low 91c. per pound to $1 per pound. This puts it at the same price level as material from Ceylon which has been at the $1 per pound mark for some time.

Chenopodium—From its previous high $4.75 per pound this oil has advanced to $4.95 per pound.

Clove Leaf—Reports from source indicate that the market is a bit easier. Spot prices, however, are unaffected.

Lemongrass—News from source is that the market is strong.

Lime—Very little interest is said to be shown in lime oil.

Nutmeg—The market remains steady.

Ocotea Cymbarum—The market is said to be quite strong. No spot price has been noted with material still being quoted at its previously listed price, 45c. per pound.

From source, however, comes the word that the growers and producers in Brazil are discouraged because of the deflated status of the general market. They feel that current prices hardly justify their producing the oil and apparently they are cutting back on production for this reason.

The 45c. pound price is higher than 1959's range—37c. to 48c. per pound, and 1958's range—39c. to 50c. per pound. It is, however, considerably lower than the prices that were in effect from 1952 to 1957, according to the OPD 1960 Hi-Lo Chemical Price Issue.

Price Trends

Advanced
Cedarwood, 10c. per lb.
Chenopodium, 20c. per lb.
Citronella, Java-type, 9c. per lb.
Spearmint, 40c. per lb.

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
145.50	145.39	144.94	146.42

For Current Prices see page 8

Peppermint—Some dealers have adjusted their prices upward, but the OPD low remains at its previous level, $5 per pound for natural material and $5.25 per pound for redistilled material.

Spearmint—The low of the range has advanced from its previous level, $6.60 per pound, to $7 per pound.

Imports Detained at N. Y.

Week Ended November 18, 1960

Anise seed, 2 lots, 200 bags
Cassia, 8 lots, 919 bales
Cumin seed, 2 lots, 216 bags
Nutmegs, 4 lots, 415 bags
Sage leaves, 300 bales
Sesame seed, 200 bags
Turmeric, 70 bags

Aromatic Chemicals

Musk — Synthetic material remains at its previously-quoted prices: Ambrette—$4.45 to $5.15 per pound; keytone—$4.60 to $5.30 per pound; and xylol—$1.40 per pound.

The quality for synthetic material, of course, is consistent which is more than can be said for the quality of the natural. According to an article in the Journal of the Society of Cosmetic Chemists by Mr. D. E. Butterfield, the natural material varies from source to source and it is difficult to give an odor description which is characteristic of musk.

All natural musks from deer possess the sweet clean musk odor; the bouquet varies. In fact, Mr. Butterfield says, one must accept natural musk as a perfume rather than as one characteristic note. The distinct effect of civet with an undertone of castoreum is blended with the musk-like odor.

And from this, the author points out, it can be seen that it is quite impossible to obtain a "natural" musk effect with just one pure chemical. Even so, the synthetic musks occupy an important place in all areas of perfumery.

In another section of the article, written by J. Pickthall, it is explained that the natural musk has been known for hundreds of years. It is obtained from the musk deer which lives in high altitude wooded areas. The animal has a pouch which contains musk grain which are extracted with alcohol and allowed to stand for several months.

After filtration, the tincture is obtained which is used in high grade perfumes.

This one deer, however, is not the only source of the musk-like odor. Other animals from which this odor may be obtained are: rat, duck, shrew, beetle, ox, alligator, goat, civet-cat, rock-badger and zebra.

It is also found in the following plants: angelica, ambrette seeds, mallow, thistle and orchis.

Seeds and Spices

Cassia—Slight weakening is noted in the market. Batavias and Korintjes remain quiet and moderately priced.

Chillies—Mombasa (Uganda) material advanced in price from 68 cents per pound to 70 cents per pound.

Cloves—Zanzibar number 1 material advanced from 41 cents per pound to 42 cents per pound.

Coriander—Spot market is easier with the arrival of material recently, but reports from source indicate that there might be a shortage of material come spring.

Nutmegs — Substantial firmness was noted among East Indian nutmegs. From the previous price $1.35 per pound, the price has advanced to $1.42 per pound. Reports from source indicate that there was a dock strike in the West Indies which prevented the November shipment from leaving port.

Thyme—German material has come down in price from 15 cents per pound to

Essential Oils

13 cents per pound whereas Portuguese material has declined from 7 cents per pound to 6 cents per pound.

Pepper—Malabar black declined in price from 56 cents per pound to 53 cents per pound. Lampong black declined from 56 cents per pound to 53 cents per pound and Muntok white declined in price from 77 cents per pound to 75 cents per pound.

The following information is excerpted from the Foreign Agriculture Circular which is published by the US Department of Agriculture.

World pepper production during 1960, forecast at 191.2 million pounds, would represent the highest level of postwar production, and would mark the first time that the prewar average of 184.2 million pounds has been exceeded.

Indonesia, India, and Sarawak provide the bulk of the world's pepper, with smaller quantities being produced in Ceylon, Indochina, Malaya, Thailand, Malagasy, and the Republic of the Congo. Brazil, the newest producing country is rapidly increasing its output.

Indonesian production during 1960 is forecast at 77 million pounds, up slightly from the revised estimate for 1959 of 72.2 million pounds. Higher prices, more intensive harvesting of older plants, and plantings made after World War II entering into full production, should help the attainment of this high production.

Sarawak is expected to produce about 21 million pounds of pepper during 1960, compared with 18.7 million pounds during 1959. With the greater spread between the price of black and white pepper, Sarawak will probably produce mostly white pepper. A program to stabilize pepper prices has been initiated to counteract the wide fluctuations in pepper prices which have resulted from marketing the crop immediately after harvest.

India produces only black pepper, and production during 1960 is forecast at 62 million pounds, up slightly from the previous year. The higher prices now prevailing for pepper will probably reduce domestic use, freeing more for the export market.

The domestic market takes practically all of Ceylon's pepper. Production during 1960 is estimated at 14 million pounds, most of which is black pepper.

Malaya, Thailand, and Cambodia are expected to about equal last year's outturn.

Malagasy produces about 2 million pounds of pepper a year, and little change is expected during 1960.

Brazil's output during 1960 is forecast at 10 million pounds. Favorable prices of the last year stimulated interest in the 1960 crop.

Vanilla Beans—Prices remain pretty much at their previous levels. Mexican cut material remains at $8.50 per pound, Mexican whole material remains at $9 per pound. Bourbon material, however, declined from $8.50 per pound to $8.25 per pound.

Business continues to be slow, dealers report.

Chemicals Being Poached

—Continued from page 4

Corporation, found foreign competition to be a significant factor behind price erosion.

In this connection, he cited this list, compiled by E. I. duPont de Nemours & Co., of ten facts about foreign trade working to the detriment of the US industry:

- Since 1934 US tariffs have been reduced 75 percent.
- US tariffs now average only 5 percent.
- Average British tariffs are six times as great as those of the US.
- More than 50 percent of US imports are admitted duty free.
- Of thirty-six leading trading nations of the world, twenty-eight have higher tariffs than does the United States.
- Japanese imports into the US in 1960 will approximate $1 billion.
- The tariff on foreign cars sold in this country is 8½ percent.
- The British tariff on American cars going to that country is 30 percent.
- Approximately 75 percent of the watches sold in the United States are imported.
- The average hourly earnings in manufacturing in the United States exceed average hourly European earnings by 400 percent.

Dr. Wallace E. Gordon, of duPont, built up his contribution to the panel around the idea of "growth by innovation."

"By innovation," he explained, "I refer to the whole complex of using old things in new ways, of doing things never done before, of improving old products and making them by new methods, and of bringing forth new products."

"If we decide growth by innovation is the road to most profitable progress," he went on to say, "perhaps we must reexamine some current methods of achieving growth."

Mergers, acquisitions, addition of unrelated product lines, he said, echoing Mr. Munro's thoughts, "may lead to solid growth, but too often the opposite is true, because the acquisitions are made with insufficient knowledge of the market or of customers' real problems."

PMA Meeting to Weigh

—Continued from page 7

retary of the American Pharmaceutical Association.

A report on PMA activities by Dr. Austin Smith, association president, will kick off the afternoon session, followed by a public relations workshop.

Highlight of the second day's sessions will be presentation of the scientific award to Dr. Lowell Coggeshall, vice-president of the University of Chicago.

Earlier, symposiums will be held on "Expectations of the Pharmaceutical Industry by the Medical Profession," and "Research—An Industry Way of Life."

Closing the meeting on Wednesday, December 14, will be a round table discussion of "Marketing—The Practical Application of Research," and luncheon addresses by John L. Hammer, jr., of Merck & Co., and Oren Harris, congressman from Arkansas, who will discuss "Congress and You."

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Oils, Fats and Waxes

There was little snap to trading in oils and fats last week, as buying interest continued spotty, chiefly for actual needs. Edible oils were quiet and unsettled reflecting the easiness in soybean oil which closed slightly lower. Corn and cottonseed oils were unchanged, while peanut oil sold down ½ cent. Corn oil foots were firm and slightly higher, while cottonseed foots were ¼ cent lower. Crude coconut oil was steady, with copra.

Tallow and greases continued in a strong position despite light buying interest. Offerings continued scanty and closely held at ⅛ cent to ¼ cent above recent sales. Choice white grease was scarce and in active export demand. Light offers were raised at least ¼ cent per pound.

Consumer interest for industrial oils was slow and confined to actual needs. No. 1 Brazilian oil was easier and off ¼ cent per pound. Tung oil was quiet with asking prices shadable. Linseed oil was in good demand for spot delivery, while interest in futures continued inactive. Crude tall oil was firm for prompt delivery and the price was adclosely held at ⅛ cent to ¼ cent above vanced ¼ cent per pound effective January 2 by one producer.

Exports of U.S. soybean and cottonseed oils in 1960-61 are forecast at a new high of about 1,500 million pounds, exceeding the 1959-60 record of 1,456 million pounds, according to the Foreign Agricultural Service. Increased shipments under government programs will more than offset smaller sales for dollars. Little change from last year's high of 142 million bushels of soybeans is expected, but exports of oilseed cakes and meals at 600,000 tons will be down from the 1959-60 record of 870,500 tons.

There is likely to be a substantial drop in the movement to northwestern Europe which should, in large part, be offset by more exports to Spain. Spain is expected to at least triple her last year's purchases of 31 million pounds for dollars.

Price Trends

Advanced

Corn oil foots, 95%, ⅛c. per lb.
Grease, choice white, ¼c. per lb.
Lard, cash, 3.20c. per lb.

Reduced

Castor oil, No. 1, Braz., ¼c. per lb.
Cocoa butter, ½c. per lb.
Cottonseed oil foots, 95%, ¼c. per lb.
Peanut meal, 50c. per ton.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.
Soybean oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
104.91	105.39	107.89	122.67

For Current Prices see page 8

Vegetable Oils

Castor—Delivery against recent orders moved in steady volume, while new business was quiet. No. 1 Brazilian oil was easy and available at 18¼c. per pound, tankcars, New York, prompt delivery. Domestic grades were quiet and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	150,000	676,000
Previous week	....	600,000
Corresponding week, 1959	....	2,252,000
Total this year	3,503,450	80,236,000
Corresponding period, 1959	24,349,000	88,772,000

Coconut—Crude remained steady. Tankcars were quoted at 12¾c. per pound, f.o.b. Pacific coast, immediate shipment and 12⅝c., December-January forward. At New York, the market ranged from 14¼c. to 14⅜c., tankcars, for prompt delivery. Trading was reported quiet.

Corn—Crude was steady and held at 14c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined oil was quoted at 17¼c., tankcars, New York basis.

Cottonseed — Futures developed an easier tone on the New York Produce Exchange last week reflecting the weakness in allied markets. Trading was quite active and mixed. Market closed moderately lower. Export news improved. Morocco bought 1,700 tons of cottonseed oil and 2,000 tons of soybean oil, for December-January shipment. Pakistan was in the market for 10,000 tons of vegetable oils and Greece received offers for 16,000 tons of vegetable oils. Cash oil was steady. Refined salad was held at 13¾c. per pound, tankcars, New York, prompt delivery.

Crude oil trading was active for refiners account. Sales were made at 10c. per pound, tankcars, Valley; the southeast ranged from 10⅛c. to 10½c., as to location; Lubbock, 9¾c. and 9⅞c., Waco.

Linseed—Consumers continued to confine purchases to actual needs. Raw oil was unchanged and held at 12.30c. per pound, tankcars, Minneapolis for November-February; 12.50c., March-May delivery, same basis and 13.41c., tankcars, f.o.b. New York.

Olive—Buying interest continued to lag. Spanish oil was easy for prompt shipment and was offered at $49.50 per 100 kilos, drums, f.o.b. ports. Offers of new crop oil were not liberal and reported available about $1 below prompt shipment for December forward. Trading on spot was slow. Oil in drums was unchanged at $2.25 per gallon, exdock and $2.30, exwarehouse.

Palm—Demand was confined to actual needs. Prices were unchanged at 14c. to 15c. per pound, drums, spot, as to quantity and 11¼c., tankcars.

Peanut—Crude was lower and sold at 13½c. per pound, tankcars, f.o.b. mills, southeast, prompt delivery. Refined oil declined to 16¾c., tankcars, New York basis.

Rapeseed—Small lots were in demand for immediate needs. Tankcars were quoted at 13¼c. per pound, New York basis. Drums ranged from 15¼c. to 15½c., spot, as quantity.

Soybean—Market was slightly easier. Crude was offered at 10¼c. per pound, tankcars, Decatur, unrestricted, November and 10c., December. Refined salad held at 12.30c. per pound, tankcars, New York, prompt delivery.

Morocco purchased 2,000 tons of soybean oil and 1,700 tons of cottonseed oil for December-January delivery.

Soybeans crush in October was placed at 35,563,000 bushels compared with 26,873,000 bushels in September and 35,340,000 bushels, October last year.

The government has exported 110,696 metric tons of soybean oil during July through October 1960 under the PL 480 program and 9,966 metric tons of cottonseed oil during the same period, it was announced by the Department of Agriculture.

Tall—Strong tone featured this market Crude stocks were limited and firmly held from 2⅞c. to 3⅛c. per pound, tankcars, f.o.b. works, prompt shipment according to seller and quantity. Demand was active. It was announced the price will be advanced to 3¼c. per pound, carlots, works, effective January 2 in one quarter.

Tung—Market was quiet. Imported oil was offered at 22½c. per pound, tankcars, New York for prompt delivery and shadable. Drums were unchanged at 24¼c. to 24¾c., spot, as to quantity. Domestic oil was offered at 22¼c., tankcars, f.o.b. works for November-December and 22c. late December forward.

The government last week sold 840,000 pounds of tung oil for export frm 15.25c. to 15.50c. per pound, bulk, f.o.b. Marreo, La.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, November 25, follow:

	Sales	High	Low	Close
		Cents per Pound		
Dec.	280	12.14	11.85	11.91S
March	470	12.24	11.96	12.12S
May	445	12.33	12.05	12.21@12.23
July	264	12.40	12.10	12.32@12.33

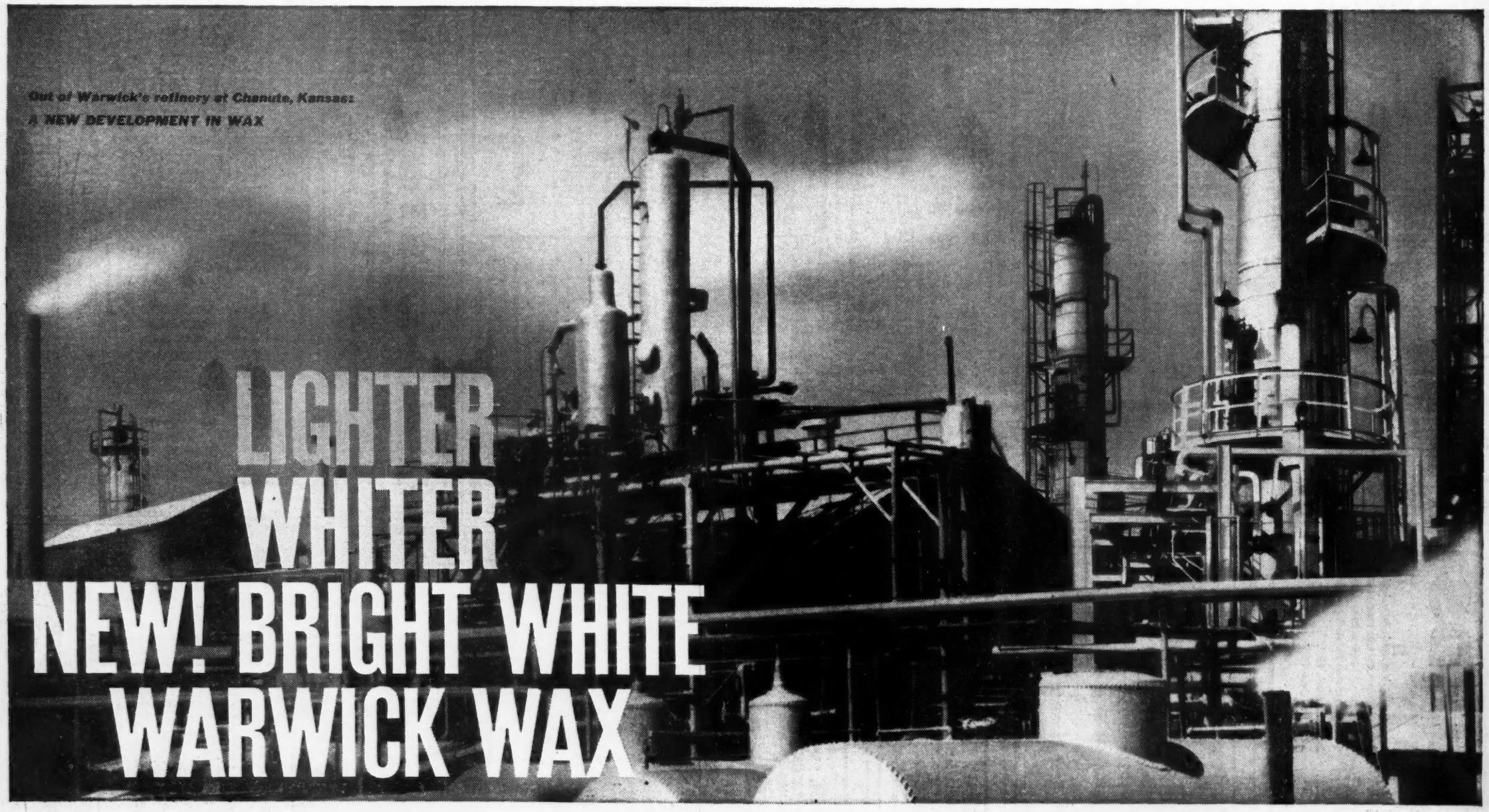
Total sales and switches, 1,459 contracts.

Miscellaneous

Cocoa Butter—This market was easier. Stocks on spot were lower at 64c. to 69c. per pound, as to quantity.

Copra—Market was quiet and slightly lower. Prompt shipment was offered at

—Continued on page 81



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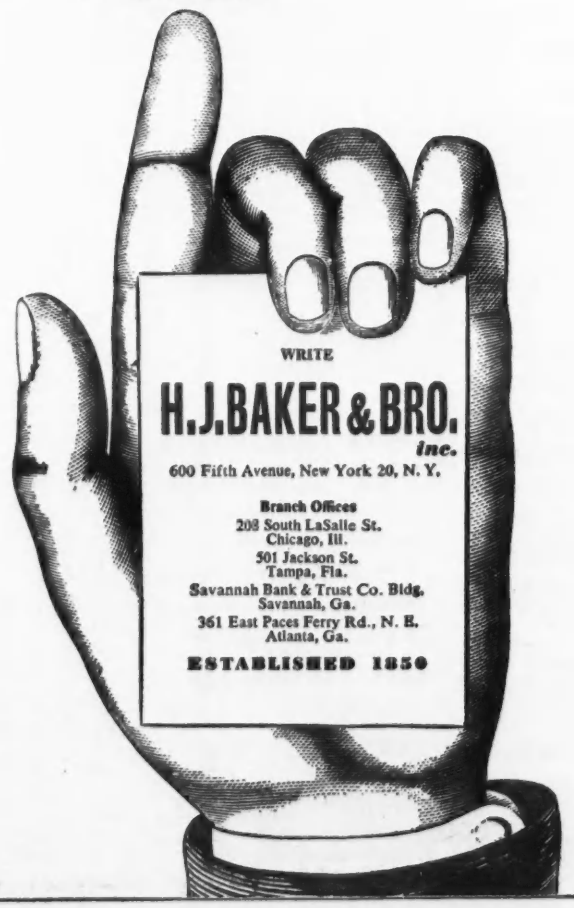

Oils, Fats and Waxes

—*Continued from page 50*

$172.50 per ton, c.i.f. Pacific coast, with sales reported at $171 per ton.

Exports of copra from the Philippines in calendar 1961 are expected to exceed the 1960 quantity by around 130,000 short tons, oil equivalent basis, it was reported by the Foreign Agricultural Service. On the October 1 marketing year, however, the increase will be somewhat less as the pickup over a year earlier is not expected until after December 1960.

Flaxseed—Bids on cash flaxseed were unchanged at $2.75 a bushel, spot and to-arrive, basis Minneapolis. Short-covering strengthened undertone and "edges" of 2c. were obtainable on limited quantities. Offerings were negligible and several days were completely blank in the spot market. Several large plants were shut down, curtailing activity in cash flaxseed.

U.S. exportable supplies of flaxseed and the seed equivalent of linseed oil in the marketing year which began last July 1 are estimated at about 6 million bushels, or 5 million less than a year ago, according to the Foreign Agricultural Service. About 2.7 million bushels moved out by the first week in November and it appears likely that the remaining quantity also will be shipped during the present season.

Current world prices are well below last year's level and are expected to stay so, reflecting increased exportable supplies from the major U.S. competitors—Canada and Argentina.

Fats and Greases

Greases—Choice white grease continued in demand and was higher ranging from 9c. to 9¼c. per pound, tankcars, delivered. Offers continued scarce. Yellow grease was maintained at 5c. to 5¼c., same basis, as to acid.

Lard—Cash lard was steadier and advanced to 10.15c. per pound, drums, Chicago. Trading was reported spotty.

Tallow—Firm tone continued to feature the market. Trading was light, but the scarcity of offerings kept the market strong. Bleachable fancy ranged from 6c. to 6¼c. per pound, tankcars, delivered; prime, 5⅞c. to 6c.; special, 5½c. to 5⅝c.; No. 1, 5c. to 5⅛c. Guaranteed fancy sold at 6½c., same basis. Export inquiry was fairly active. Guaranteed fancy was quoted at 6⅝c. per pound, bulk, f.o.b. steamer and 7⅛c., drums, f.a.s.

Cake and Meal

Cottonseed Meal—Demand was light chiefly for domestic delivery, with export business still slow. Meal, 41 percent, was offered at $55 per ton, sacked, Mississippi Valley; $57.50 Alabama and $60 to $61, South Carolina and Georgia area.

Linseed Meal — Demand improved slightly in this market and prices were firm. Several crushers were not offering deferred supplies and withdrawals against old contracts absorbed limited production. Dullness in linseed oil and resultant prospect of continued slow production caused formula feed manufacturers to maintain better inventories. Extracted meal, 34 percent, was quoted $52 a ton for November delivery and $53, December. Old process expeller meal was steady at $58 for November and $58.50, December.

Soybean Meal—Slight recovery was made from recent lows in this market, but not enough to indicate a turn to sustained strength. Demand was moderately better from formula feed manufacturers, but this was largely offset by heavy production, near peak levels. Meal, 44 percent, was held at $43 a ton, unrestricted, bulk, Decatur, for prompt delivery.

Waxes, Vegetable

Consumer interest was more active and a sizable volume business was reported for immediate and later needs last week. Carnauba grades were in good request and market displayed a steady tone on spot. Offers for shipment from Brazil continued light. No. 3 Ceara crude ranged from 67c. to 69c. per pound, for spot delivery with Parnahyba held at 2c. more. Yellows remained unchanged and steady. Chalky was practically cleared from the spot market and price was merely nominal at 73c. per pound.

Scarcity of crude beeswax continued to dominate the market. Offers for shipment from primary sources were scanty and held at 1c. to 2c. higher. This was reflected in refined beeswax though quotations as yet have not advanced. Brazilian crude was higher at 58c. to 59c. per pound, prompt delivery and Central American at 54c. to 55c. Crude Africa remained firm and scarce.

Demand for Japan wax was more active with trading on the basis of 29c. to 31c. per pound, spot, as to quantity.

Yugo Superphosphate

—*Continued from page 7*

date, according to the article in *"Commercial Information."* A 50,000-ton storage unit is said to be fully mechanized with modern conveyors, packaging equipment and shipping facilities.

Using the nearby Danube as a waterway, the plant will receive crude phosphates from Jordan, upgrade them with sulfuric acid and other locally available materials, and ship the refined product to distribution points around the country—and presumably, to some overseas markets.

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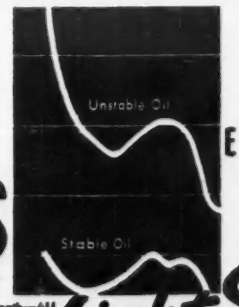

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Petroleum Derivatives

The change in toluene from a delivered to an f.o.b. basis received support last week as a second oil company made official its adoption of the new terms. The confirming action of the second refiner is expected to trigger the balance of the industry into posting the f.o.b. schedule by Dec. 1 in order to have it effective for first quarter 1961. Cokeoven suppliers, whose notification deadline for the first quarter is later at Dec. 15, are studying the reaction of petroleum firms before declaring themselves officially. It is felt, however, that if the new schedule gains general oil industry acceptance the cokeoven suppliers will follow suit.

Crude petroleum and product demand for 1960 will gain 2.2 percent over last year. That's the estimate of Bureau of Mines' monthly forecast in which demand for the fourth quarter is estimated at 10,307,000 barrels daily bringing the 1960 average to 9,876,000 barrels daily. Various industry predictions put next year's demand at 2 to 2½ percent higher than 1960 volume.

December will see a boost in crude oil production according to the Bureau's monthly marketing report. Consumption is expected to be 7,125,000 barrels as compared with 6,925,000 barrels forecast for November.

Forecast includes a total gasoline demand of 4,500,000 barrels daily for December, a gasoline yield of 45.0 percent and total crude runs of 8,120,000 barrels daily. Total gasoline demand forecast for December is a 0.1 percent increase of the same month last year.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 27, 1959
103.74	103.74	103.74	103.04

For Current Prices see page 8

Aromatic Solvents

Benzene—"There's just no spot material available," a trade source remarked last week while commenting on the tight supply of this basic chemical.

Petroleum producers are cranking out material at a record clip but the high level of sustained demand has prevented supply from catching up to the urgent calls of industry.

Steel rate is at half mast cutting cokeoven supplies at a critical time and imports have dried up—no material reported arriving in September, the last month for which figures are available.

Despite long prevailing tight supply most trade sources have held the opinion that price would remain at 34c. at the first of the year. Lately, however, there has been some talk of a nominal increase. One-half cent a gallon seems to be is the figure mentioned although most sources still hold to their oft-stated contention that the threat of oversupply in the second half of 1961 will keep price constant at current levels. At any rate any change will have to come fast—December 1 is notification deadline—and general feeling is that there is not enough sympathy for an increase, even a nominal one.

Toluene—Another major oil supplier reports that effective January 1 the terms for toluene will be 25c. a gallon, f.o.b., terminals and refineries. Thus with the lead announcement confirmed by a second company it seems assured that the industry as a whole will change terms to an f.o.b. basis by December 1.

Xylene—Activity was described as routine by one trade source last week. Not unexpectedly auto production has fallen off seasonally though reports of record sales in October are encouraging as once high dealer inventories are beginning to recede. Prospects for a good '61 model year volume is welcome news to solvent sellers.

Booming fraction demand is emphasized by the announcement of an expansion of a paraxylene plant at Baytown, Texas. Capacity of the plant—now 65 million pounds—will be hiked to 105 million pounds by the end of the first quarter, 1962.

In the current market, price continues the tendency to fluctuate from region to region on the basis of hot competition. Prices range from 27c. to 30c. depending upon location.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Nov. 12 totaled 235,646,000 barrels, according to data reported by the Bureau of Mines, compared with the total of 232,375,000 barrels for the preceding week. This represents an increase of 3,271,000 barrels, comprising an increase of 3,346,000 barrels in stock of domestic crude and a decrease of 75,000 barrels in stock of foreign crude.

Aliphatic Solvents

Cleaners Naphtha—Demand is currently undergoing a seasonal dip. Blamed are weather and styles. The delayed arrival of winter temperatures has put a crimp in the dry cleaning of heavy clothing while introduction and acceptance of a wide line of women's wear this season has relegated last year's models to the closets and not to the retail dry cleaner. Result has been reduced sales of naphtha to the dry cleaning trade. Prices at the 105° and 140° flash points are unchanged.

Hexane—Demand continues well sustained on the strength of oil etxraction of the cottonseed and soybean harvests.

Price remains unchanged at 20c. a gallon, New York and New Jersey and 16c., Houston.

LPG's

Butane—Production in the period Oct. 16-31 totaled 89,067,000 gallons as compared with 94,023,000 gallons in the same fortnight a year ago.

Inventory on Oct. 31 was reported to be 331,513,000 gallons, an increase from the 227,154,000 gallons recorded on the same date last year.

Ethane-Ethylene—Output rose in the period Oct. 16-31 to 30,297,000 gallons after registering 28,534,000 gallons in the previous fortnight and 20,468,000 gallons in the last two weeks of October, 1959.

Inventory on Oct. 31 was 913,000 gallons, the same amount as recorded on Oct. 15 and considerably lower than the 2,121,000 gallons reported in stock on Oct. 31 last year.

Iso-Butane—Output dipped to 27,351,000 gallons in the last two weeks of October when compared to production of 30,150,000 gallons in the same period last year.

Inventory showed a sharp decline with 25,238,000 gallons reported on Oct. 31 as against 51,257,000 gallons on the same date last year.

Propane—Production in the Oct. 16-31 period was 195,055,000 gallons, a drop from the 184,610,000 gallons turned out in the same two week period last year.

Stocks climbed to 785,294,000 gallons on Oct. 31 after recording 747,260,000 gallons on the same date last year.

Miscellaneous

Current reports of the industry for the week ended November 11, 1960 indicate an increase in crude-oil production and a decrease in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,955,000 barrels, an inucrease of 15,000 barrels from the preceding week. Daily average crude runs to stills of 7,717,000 barrels were 113,000 barrels below the preceding week, and 175,000 barrels below the week ended November 13, 1959. Runs of foreign crude amounted to 1,066,000 barrels daily, compared with 1,093,000 carrels in the preceding week. For the four-week period ending November 11, crude oil production averaged 6,872,000 barrels daily, and crude runs to stills averaged 7,857,000 barrels daily with runs of foreign crude averaging 1,041,000 barrels daily.

Trade Name Chemicals

Makers of pressure-sentitive adhesives are getting ready to cash in on the lengthy research efforts of vinyl flooring producers to turn out a product that would utilize a contact backing. Research in this area has been under way for some time and although no one is currently marketing a vinyl floor tile with a contact back (Robbins Floor Products Inc. dropped their "Peel and Stick" last year) some of the big vinyl floor tile producers are reported less than a year from commercial marketing of such a product.

Pressure-sensitive materials first began to reap a harvest in the field of vinyls with the introduction of decorative vinyl wall coverings with a contact back, and although problems have cropped up (lack of heat stability and limited aging characteristics), a fast-moving technology has managed to keep abreast of market development and maybe a step ahead.

Adhesive Is the Sticking Point

In theory, the application of floor tile with a contact back is fine, say some observers, but success hinges on development of an adhesive that will stick in spite of dust on the floor or uneveness of the surface. The adhesive would also have to be stable to heat to be applied in kitchens or bathrooms, they say.

For the immediate future, floor tile makers say they're sticking with liquid adhesives. B. F. Goodrich markets "Koroseal," a vinyl asbestos product and "Ever-Nu," a solid vinyl, both applied with a water-proof paste.

General Tire & Rubber Company's Blota-Floor Division sells "Bolta-Floor" and recommends use of their adhesive "M-10" a liquid adhesive in an alcohol, and Armstrong Cork has "Korlon" to be used with adhesives "S-128," water-soluble, or "S-214," water-proof.

Another rapidly developing field for pressure-sensitive adhesives has been in label stocks. The 1958 Census of Manufacturers Report shows sales of $3.4 million in "pressure-sensitive tapes, not specified by kind." This was the first time this category was reported.

According to R. G. Breeden, managing secretary for the Pressure-Sensitive Tape Council, it probably includes the growing volume of label stock materials which are turned out in blank, pre-gummed sheets by such major producers as Simon Adhesive Products Corporation, New York; Kleen-Stik Products, Inc., Chicago; Avery Label Company, Monrovia, Calif.; and Fasson Products, Painesville, Ohio, a division of Avery Label.

To these and other producers of label stocks, pressure-sensitive adhesives are nothing new. Their history goes back twenty or twenty-five years. But high price and lack of demand in industrial outlets kept them on the shelf at first.

Factors Boosting Pressure Tapes

Observers point to these factors as having boosted stock in pressure-sensitive materials during the past decade and kept technology developments coming out at a rapid pace.

- The phenomenal growth of self-service markets and retail outlets which require more product labeling and identification.
- Packaging of consumer goods in newer plastics such as polyethylene and lacquered cans which are not adaptable to water gum labels.
- Modern conditions of storage, food lockers and frozen food bins where glue from other types of labels would crystallize and crack. (Some pressure-sensitive adhesives are reported active over a temperature range of minus 40 degrees to 150 degrees F.)
- Realization on the part of label makers that the total adhesive cost in their products includes the cost of applying as well as that of the adhesive itself. Of the four general types of labels (plain labels, remoistenable types, heat sensitive and pressure-sensitive) only the last is always in activated condition.
- Improved methods of producing labels on the graphic arts level.

Probably the biggest factor in the growth of pressure-sensitive adhesives on the industrial level was the reverse-English effect of Minnesota Mining & Mfg. Company's marketing of "Scotch Brand Tape."

Ordinarily, a product is developed on the industrial level and then moves into the home, as in the case of synthetic detergents. Not so with tapes.

PRESSURE TAPES: SIZE OF MARKET

	Million
Plastic Backing*	$88.9
Paper Backing	72.8
Cloth Backing**	15.7
Other***	6.1
Unspecified Tapes	3.4
Total	**$186.9**

Above sales figures for pressure-sensitive tapes are from the 1958 Census of Manufactures

*Includes cellophane
**Excludes surgical tape
***Excludes rubber electrical tape

3M is considered something of a semi-competitor to producers of industrial pressure-sensitive tapes in that the company manufactures its own raw material at Bristol, Pa., and then sells to itself. Johns-Mansville Corporation also produces some tapes and buys others.

J-M last year opened its "Dutch Brand" plant at Chicago. The unit electronically controls production of adhesives, pressure-sensitive tapes and elastomers for adhesives use.

The Angier Adhesives Line

The "Angier PS 5502," "TS 5515" and "PS 5518" products are general purpose pressure-sensitive adhesives marketed by Angier Adhesives Department, Interchemical Corporation, Cambridge, Mass.

Also manufactured by the company: "Angier PS 5505." for vinyl electrical tapes, and "PS 5509." for decalcomanias.

Angier reports the company is trying to develop a suitable acrylic-based pressure-sensitive adhesive and cites good general tack properties, dead-load strength and high shear value and shelf life as attractive properties which should boost development of acrylics in this outlet.

Catalin Corporation of America has moved into this field during the past year and offers "Catalin Resin A-1120" and "A-1107" which are acrylic-based resins for compounding pressure sensitive adhesives.

Catalin's general sales manager, E. W. Bastian, says application in label stock looks good and he feels that this is one area where acrylic-base materials have not been used before. A good bet as an added starter in this specialty application is Rohm & Haas Company with their integrated acrylics facilities.

An Angier breakdown of end-uses for pressure-sensitive adhesives lists electrical tapes at the top with decalcomanias a close second and labels, surgical tapes, vinyl wall covering and pressure-sensitive paper making up the balance of the market.

Rubber and Asbestos Corporation markets "Bondmaster" liquid adhesives for industrial use. About 30 formulations are made and each may contain a dozen or so chemicals, the company reports. As to pressure-sensitives, the firm says polyvinyl ethers are being widely used, although certainly not to the exclusion of other materials. Virtually every elastomer and resinous materials has been tried in pressure-sensitives. Composition depends on end-use. For instance, substances going into surgical tapes would have to be strictly non-toxic. Masking tapes for autos, going through a bake cycle, have to be heat stable and tapes used in freezer wraps have to be active at low temperatures.

Reichhold Chemicals, Inc., has under way a development program aimed partially at developing phenolic resins for restricted applications in pressure-sensi-

The company has nothing to announce, as yet, concerning applications for

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Trade Name Chemicals

phenolics in pressure-sensitive adhesives, but says testing on a neoprene-phenolic adhesive has been under way for more than a year.

One of the difficulties in using pure phenolics in masking tapes, for example, is discoloration. A phenolic-based adhesive on a masking tape used to cover a white enamel tends to stain.

Other established adhesive products of RCI are the ester gums "Synthe Copals" and terpene phenolics, tradenamed "Super Beckacites."

The ester gums are established products at which the company is taking a new look with a view to standardization to make the line more acceptable to the adhesives industry.

Reichhold markets two products, at the top and bottom of the melting point range, in the "Super Beckacite" line, and it is here that the company plans to expand operations to make a family of resins.

Epoxy Adhesives Use Growing

Epoxy resins have moved into virtually every plastic applications area during the past decade and adhesives are no exception. Although volume is estimated at something less than 3 million pounds now and cost has hampered more widespread use, epoxy adhesives in some applications do the best job.

The combination of strength and internal flexibility which the epoxy adhesives show contributes to high shear strength, high impact strength and high creep strength, all desirable properties in an industrial adhesive.

Epoxy adhesives are reported which have tensile strengths up to 8,000 psi with virtually no fall-off in shear strengths at 180 degrees F. These materials can be modified to play up peel strength and flexibility. Internal flexibility is high enough to permit bonding of components with widely different coefficients of expansion. For example, aluminum channels can be bonded to glass panes in the manufacture of double-pane insulating windows.

Epoxy adhesives are available in supported film form; in lump form to be heated and applied to the surface as a hot meld; in powder form and as one-component solvent-free paste adhesive systems as well as two-part solvent-free systems.

Epoxies can be bonded right after application due to the fact that cure takes place without formation of by-products such as water formation in the cure of phenolic resins.

Space Chemicals

—Continued from page 3

should seriously look into the idea of producing propellants at sea and of using available seawater and nuclear power in the operation.

Such a step may be necessary, Mr. Terlizzi contends, because "as thrust requirements for chemically fueled rockets increase to the 5, 10, 15 and 20 million pound thrust category, permanent land bases for launching these 'monsters' may be inadequate."

This, he goes on, raises these distinct possibilities: sea launch sites, prepellant production on tankers and the piping of propellants miles out to sea launch sites.

Mr. Terlizzi is convinced that boron, fluorine and lithium will play major roles in new propulsive systems and urges the industry "not to overlook the future market possibilities in electric propulsion techniques."

While solar sells are doing a good job at the present time, he points out that they have a severe disadvantage: "the presence of perturbing torques such as could be caused by men moving around a space vehicle."

"Nuclear power generation systems," he continues, "are plagued with potential radiation hazards and shielding provisions for combating this often turn to a disadvantage when comparable systems are evaluated in terms of space application."

Key Fuel Cell Problem

One of the key problems in the performance of fuel cells, Mr. Terlizzi reports, "is that control of phase separation between liquid and gaseous fuels may be troublesome in zero-gravity conditions."

What about a chemically stored energy system? Says the Stauffer space specialist:

"Nickel-cadmium and silver-zinc batteries will be utilized in increasing numbers in space probes and space vehicles. However, weight is a factor and, therefore, some compromise must be made.

"Nickel-cadmium batteries hermetically sealed are the most suitable stored energy devices at this time."

Lyman G. Bonner, director of development for Hercules Powder Company, Wilmington, Del., suggests that there is a rich market beckoning in solid propellants.

What's needed first, he says, is to upgrade the present oxygen system. "Along this line," Mr. Bonner reports, "nitronium perchlorate and hydrazinium perchlorate have become articles of commerce."

The major market break, he thinks, will come when oxygen is replaced with fluorine. "The big problem here," he stresses, "is to make the material tractable; to solidify it without sacrificing an undue fraction of its chemical potential.

The Most Effective Course

"Fluorocarbons are almost worthless because of the stability of the C-F bond. Thermodynamics here points to the union of fluorine with oxygen or better still with nitrogen as the most effective course.

"Nitrogen trifluoride and perfluoro hydrazine are already available as raw materials and we may predict a major effort aimed at producing stable NF_2 substituted compounds compatible with solid propellants."

What kind of market is there in all this? Mr. Bonner points to ammonium perchlorate, the only new basic material aimed solely at solid propellant use.

Ammonium perchlorate, he notes, has grown from nothing fifteen years ago to around 30 million pounds in 1959. Some experts predict that consumption will jump to a 100 million pounds within the next few years.

While perchlorate gives an indication of the size of the solid propellant market, Mr. Bonner makes it clear that it "would be unrealistic to expect this kind of growth" for nitronium and hydrazinium perchlorates and the other advanced chemicals described above.

Borden, US Rubber

—Continued from page 3

chem, Inc., a joint-company formed by the two partners last May. Completion is expected in 1962.

A supply contract has been negotiated with Sugarbowl Pipeline Company of Thebodaux, La., for natural gas, the major raw material.

Both US Rubber and Borden intend to erect adjacent individually-owned plants to use the output of the Monochem facilities for the manufacture of other chemical products.

Option price of the parcel of the newly-acquired land is calculated at $1,190,000, on an onnounced price of $1,400 an acre.

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Rotary Kilns 8'x60'; 8'x115'; 4'x30'.
Roto Louvre Dryers 1106-36; 705-25; STAINLESS 604-24; 310-16; 207-10.
Traylor 8'x11' Ball Mill, Steel Lined.
Tolhurst 40' SS Centerslung Centrif.
Shriver 30"x30" Filters 36 P&F—1" cake.
Sweetland #7 & #12 Filters.
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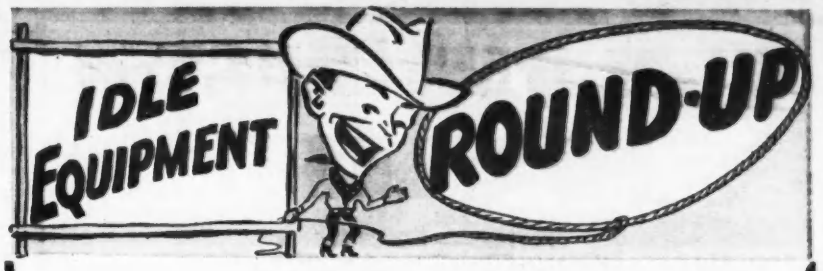

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Buflovak S/Steel Thermo-Recompression Evaporator; Sanitary with all accessories.
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Stokes Rot. Jacketed; 34"x10'.
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Stainless Lab. Drum Dryer, 8"x11½" complete.
Bowen S/S Lab. Spray Dryer.
Louisville S/S Rotary Dryer, 30" x 28'; Indirect fired.
Louisville MONEL Rotary Steam Tube; 54" x 35".

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2 Stainless Micronizers 30".
Ball Mills and Pebble Mills by Abbe, Patterson, International some Jacketed; up to 8'x8'.
Mikro Pulverizers up to No. 4's.
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American Ring Roll Crusher; 50 HP.
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2 Stainless 400 gal. Reactors Jktd. Agtd. by Patterson and Struthers Wells.
Stainless Reactor, 2000 gal. Fully Jktd. Agitated.
Nickel Clad Reactor, 7'x11'6".
2 MONEL Reactors; 2800 gal. 6'8"x13'; ASME Jktd. & Intern.
3 Stainless Vert. Pressure Tanks; 42"x10'; closed dished heads.
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Pfaudler Gl. Lined Reactors; all sizes from 50 to 1000 gal.
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Stainless Centrifugals from 30" to 60"; A.T.&M. Tolhurst, Fletcher, etc.
2 Sharples Stainless Steel Model PN14 Super-D-Canters.
4311 S 1 Sharples C 27 Super-D-Hydrater in Type 316 Stainless with 40 HP Motor.
5147 S 13-14 Two Bird Continuous Screen Type Horizontal Centrifuges; Monel & S.S.; 24" x 24".
2 Bird Rubber Covered, 48" with Plows; Fume Tight; 40 HP.

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Patterson Conaform S/S Vac. Blender, 13.7 cu. ft. Jacketed.
Stokes Model 138 D Vacuum Shelf Dryer; Complete.
Stainless Lab. Drum Dryer; 8" x 11½".
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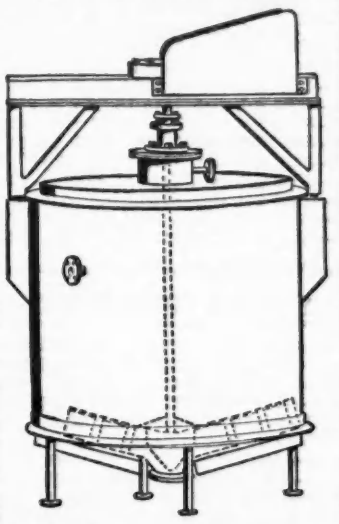

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Readco Jktd. 15 gal. Dbl. Arm Sigma Blade Mixer.
Stainless Steel 150 gal. Jktd. Dbl. Arm Mixer with Vac. Cover; Hydr. Tilt;
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4 Pressure Filters 30"x56" Type 316 Stainless; 100 sq. ft.
Sparkler S/S Filter Model 14 S 4.
Sparkler Steel Filter Model 33 S 17.

OLIVER PRECOAT FILTERS

3"x2" Monel. 5'3"x8' Stainless.
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Feinc S/S Rot. Vac. Filter 3'x1'.
Oliver Cont. Rot. Vacuum Filter.
Panel Type; 8'x8' and 8'x10'.
S/S Nutsche Type Filter; 6'x2'.
Bowser Filter with Pump; 2000 GPH.
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1—3500 GAL. STRUTHERS-WELLS, T316 SS JKT. REACTOR, AGIT.
1—1900 GAL. T316 SS JKT. REACTOR, 5 HP AGIT., VACUUM.
5—1350 GAL. T347 SS JKT. KETTLES, ANCHOR AGIT.
1—1000 gal. Dopp cast iron kettle, jkt., 25 HP agit.
1—750 gal. T304 SS jkt. fermenter, ASME, 10 HP agit.
1—600 gal. T304 SS jkt. crystallizing kettle, agit.
2—500 gal. Pfaudler glass-lined jkt. reactors, agit.
6—465 gal. T304L SS jkt. reactors, 175# WP.
2—125 gal. T316 SS jkt. fermenters.
2—100 GAL. T304 SS JKT. REACTORS, ASME, VAC., UNUSED.

STAINLESS STEEL TANKS

1—5700 gal. horiz., T304 SS, 6'4" x 24', UNUSED.
2—4500 gal. vert., T304 SS, 8' x 12', UNUSED.
1—4300 GAL. HORIZ. T304 SS, 6' x 20', DISHED HEADS, 50# WP.
1—3700 gal. vert., T304 SS, 6' x 17', VACUUM.
1—3300 gal. vert., T304 SS, 6' x 14', dished heads.
1—3000 gal. vert., T304 SS, 6' x 15', coils, Vac.
3—2750 GAL. VERT., T304 SS, 7' x 8', DISHED HEADS, COILS.
1—2500 gal. vert., T316 SS, 7' x 7', dished heads, agit.
2—2300 gal. vert., T316 SS, 7' x 8', coils, agit.
4—2250 GAL. VERT., T316 SS, 7' x 6'3", DISHED HEADS.
1—2100 gal. vert., T316 SS, 6' x 9'10", cone bottom.
12—1750 gal. vert., T304 SS hoppers, 235 cu. ft.
1—1250 gal. vert., T304 SS, 5' x 12', coils, vac.
2—1000 GAL. VERT., T304 SS, 5'5" x 6'2", UNUSED.
6—685 gal. vert., T316 SS, 3' x 13', coils.

SELECTED RECENT PURCHASES

1—BUFLOVAK 6" X 8" LABORATORY DBL. DRUM DRYER—VACUUM.
1—SPARKLER #33-S-19 T316 SS FILTER, 100 SQ. FT.
1—LOUISVILLE 4'6" X 25' ROT. STEAM-TUBE DRYER.
1—SYMONS 2' STANDARD CONE CRUSHER, 30 HP.
2—MIKRO #3TH PULVERIZERS, STIRRUP HAMMERS.
1—J. H. DAY #8 CINC., 150 GAL. SIGMA MIXER.
1—AMERICAN 42" X 120" DBL. DRUM DRYER, STAINLESS TRIM.
2—BUFLOVAK VACUUM SHELF DRYERS: 110, 98 SQ. FT.
1—RAYMOND 50", 5-ROLLER HI-SIDE MILL.
3—KOMAREK-GREAVES 160,000 PSI BRIQUETTE PRESSES.
1—BOWEN LAB. SPRAY DRYER, T304 SS, CONE BOTTOM, GAS.

EVAPORATORS

1—MOJONNIER 2085 SQ. FT. TRIPLE EFFECT, T304 SS, WITH PREHEATERS.
1—BUFLOVAK 1025 SQ. FT. DBL. EFFECT, T304 SS, SIZE #8-50-D.
1—Buflovak 840 sq. ft. dbl. effect, T304 SS, size #7.5-42-D.
1—Buflovak 710 sq. ft., dbl. effect, T304 SS, size #7-35-D.
1—Buflovak 700 sq. ft. single effect, T304 SS, forced circ.
1—STRUTHERS-WELLS 630 SQ. FT. SINGLE EFFECT, T316 SS, CALANDRIA TYPE.
1—Buflovak 588 sq. ft. dbl. effect, T304 SS, size #6.5-29-D.
1—F. J. Stokes 118 sq. ft. single effect, T316 SS, U-tube still.
2—Rogers 6' dia. vacuum pans, T304 SS, int. coils.

HEAT EXCHANGERS — CONDENSERS

1—1960 SQ. FT. T316 SS, HORIZ. EXCHANGER, ASME 75# WP.
1—1450 sq. ft. T316 SS vert. condenser, remov. bundle.
3—800 SQ. FT. T316 SS VERT. CONDENSERS, ⅝" OD TUBES.
1—800 sq. ft. T316 SS vert. condenser, 1" OD tubes.
1—730 sq. ft. T316 SS horiz. exchanger, remov. bundle.
1—510 SQ. FT. T316 VERT. COND., REMOV. BUNDLE.
4—T316 SS exchangers-condensers: 427, 425, 410, 400 sq. ft.
10—T316 SS exchangers: 290, 277, 264, 250, 200, 185, 165, 150, 145, 105 sq. ft.
8—T316 SS exchangers, 83, 73, 54, 52, 50, 47, 30 sq. ft.
10—Enzinger 185 sq. ft. T304 SS contin.-flow exchangers.

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OMAHA, NEBRASKA

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5—BUFLOVAK 42" x 120" DOUBLE DRUM DRYERS, ASME 160# WP.
2—BONNET 7' x 60' ROTARY HOT-AIR DRYERS, ⅜" SHELL, COMPLETE.
1—BONNET 6' x 52' ROTARY HOT-AIR DRYER, 5/16" SHELL, COMPLETE.
2—SWEETLAND #12, (24) 36" DIA. LEAVES, 336 SQ. FT.
6—SHRIVER 48" CAST IRON P. & F. FILTER PRESSES, 50 CHAMBERS.
7—DAVENPORT DEWATERING PRESSES: #1A, 2A.
2—FRENCH OIL TYPE 2-S SCREW TYPE EXTRACTION PRESSES, 60 HP.
2—QUADRUPLE EFFECT EVAPORATORS, CALANDRIA TYPE, 4050 SQ. FT., CAST IRON BODIES & COPPER TUBES. WITH 1230 SQ. FT. HORIZ. COPPER PREHEATERS & 2450 SQ. FT. PANS. TOTAL 19,900 SQ. FT.
6—ANSONIA 691 SQ. FT. HORIZ. DBL. PIPE COOLERS, COPPER TUBES.
3—AMERICAN 654 SQ. FT. SPIRAL STEEL HEAT EXCHANGERS.
18—TUBULAR HEAT EXCHANGERS, COPPER TUBES, 1500, 1350, 1130, 637, 380, 290, 184, 176, 156 SQ. FT.
1—ACME 96" DIA. X 44' HIGH COPPER BEER STILL COLUMN, (20) PERFORATED & (4) BUBBLE CAP TRAYS.
5—LEADER 96" DIA. STEEL RECTIFYING COLUMNS, 44' X 51' HIGH.
2—9500 GAL. HORIZ. STEEL COOKERS, ½" SHELL & DISHED HEADS.

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CENTRIFUGES

2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
1—Bird 32" x 50", Solid Bowl, Continuous, 316 S.S.
1—Bird 36" x 50" solid bowl continuous, 347 SS.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
1—Tolhurst 26" susp. Rubber Imperforate Basket.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—Pfaudler 100 gal. glass lined jacketed agitated Reactor.
1—150 gal. 304 S.S. jacketed agitated Reactor.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—Pfaudler 12" wiped film Evaporator.
1—700 sq. ft. Buflovak 304 SS forced circulation Evaporator.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7'x25', 50 psi.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
4—1,000 gal. 304 SS Tanks 5'6" x 6'.
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Hercules 400 sq. ft. 304 SS pressure Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Eimco 18" x 12" 316 S.S. Rotary Vacuum Filter with pumps and piping.
1—Oliver 3' x 2' 347 S.S. Rotary Vacuum Filter.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.
4—36" x 36" alum. P & F, 65 Chambers, 1-1/2 cake, hyd. clos.

DRYERS

1—Buflovak Vacuum Shelf with 20—60"x80" shelves.
1—Devine Vacuum Shelf with 10—40"x43" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
2—Buflovak 5' x 30', 3' x 7'5" Rotary Vacuum Dryers 316 S.S.
2—Louisville Rotary Steam Tube 5'x25', 6'x35' 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 10' wide Apron Conveyor Dryer 48' long.

MIXERS

1—Farrel-Birmingham "Midget" Banbury Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
1—Baker Perkins 10 gal. jacketed 304 S.S. double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—Stokes 21K, 304 S.S. Granulating Mixer 82 gals.

MISCELLANEOUS

1—Farrel Birmingham, 8" x 16", 2 Roll Chrome Plated Mill.
4—Mikro Pulverizers, #4TH, 1SH, 1SI and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.
5—Day Roball Sifters 40" x 120", 40" x 84", double deck.
1—#81 Day Roball Sifter 40" x 120" single deck.
3—Nash H6 Vacuum Pumps.
25—Chlorimet, Durimet and Duriron Centrifugal Pumps 1½" to 6".

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2—Struthers Wells type 316 SS 2000 gal. jacketed reactors complete with agitators and drives.

1—Pfaudler 750 gal. glass lined jacketed reactor complete with agitator and drive.

1—Pfaudler glass lined 200 gal. jacketed reactor complete with impeller type agitator and drive.

5—Pfaudler glass lined jacketed reactors 30 to 100 gal. complete with agitators and drives.

2—Pfaudler glass lined vacuum receivers, 20 and 30 gal.

1—Patterson 40 gal. SS reactor, 50# internal, 50# jacket.

1—Hersey SS rotary dryer, 3' x 21'.

2—Stokes single door vacuum shelf dryer with 6 shelves, 24" x 36".

1—Buflovak SS jacketed rotary vacuum dryer, 3' x 15'.

1—Patterson SS 10 gal. jacketed autoclave complete with agitator and drive, 600 psi internal, 175 psi jacket.

1—American 42" x 120" double drum dryer with drive and motor, complete.

1—Buflovak 24" x 36" double drum dryer, complete.

1—Proctor & Schwartz SS apron dryer, 2' x 20'.

10—Robinson SS double ribbon horizontal blenders, 125 cu. ft.

5—Robinson SS double ribbon horizontal blenders, 255 cu. ft.

1—Cleveland SS double cone blender, complete with drive and motor, 85 cu. ft.

1—Gemco double cone conical blender, 40 cu. ft.

2—Sturtevant SS #7 dustite rotary batch blenders, NEW.

1—Baker Perkins Size 16 UUEM jacketed mixer, double arm dispersion type, complete with compression cover and 100 HP motor, 150 gal. capacity.

1—Baker Perkins Size 15, 100 gal. SS jacketed double arm sigma blade mixer.

1—Oat SS jacketed autoclave, 10 gal., 150 psi internal, 150# jacket, complete with Dowtherm unit.

2—Louisville SS rotary dryers, 8' x 50'.

1—Allis Chalmers SS rotary dryer, 6' x 50'.

1—Stokes steel jacketed rotary vacuum dryer, 5' x 30'.

1—Williams "Comet" 4 roll mill, complete.

7—Western States 40" type 316 SS suspended type centrifuges, complete with perforated baskets, plows and 40 HP motors.

4—Tolhurst 40" center slung rubber covered centrifuges, with perforate baskets and motors.

4—Tolhurst 30" center slung rubber covered centrifuges, with perforate baskets.

20—Davis Engineering SS heat exchangers, 102, 119, 136 and 166 sq. ft. New.

1—Stainless steel bubble cap column, 4' dia. x 25' plates.

1—Stainless steel open top kettle, 2500 gals.

1—Patterson Kelley steel twin shell blender, 150 cu. ft., complete with drive and motor.

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NEW 4000 Gal. STAINLESS TANK
DAY HY-R SPEED MILL
BUFFALO 32" x 90"
DOUBLE DRUM DRYER

CENTRIFUGALS—12" 30" 40" & 48".
CENTRIFUGES—Sharples #5 & 6 S.S.
DRYERS—Hersey 5' x 26' Rotary Stainless Buffalo 32" x 90" Double Drum Dryer Buffalo Vac. Drum Dryer 24" x 28". Despatch Ovens Elec. Heated. 3—Devine & Stokes Vac. Shelf Dryers. Hope S.S. Can Filler pints to gals.
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FILTERS—#2 Sweetland 12 Stainless covered leaves.
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
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MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000. Mikro Pulverizer #4, 2S1, 2TH, 1SH. Hammer Mills & Pulverizers 3 to 50 HP. Williams #3 & #2XX Hammer Mills. Taylor-Stiles 7½ HP Cutter. Rotary Cutters 1 HP & up.
Sprt.-Wald. Stainless Spike Crusher. Pebble, Jar & Ball Mills. Lab to 6' x 8'. 3 Roll, 9" x 24", 12" x 30", 16" x 40". Lehmann 4 Roll W. C. 12" x 36" Steel
MIXERS—Baker Perkins 100 gal. Jack. B. P. 15 HP—Masticator Mixer. Day Imperial 75 & 150 gal. Change Can Mixers 8, 15, 40, 80 gal. Day Jumbo 700 gal. horiz. Mixer. Sprout-Waldron 10,000# horiz. Spiral Mixer. Blystone 3000# horiz. spiral Mixer. Day 1000# horiz. Dry ribbon Mixer. Dry Spiral Mixers 50 to 10,000#. Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM. Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
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TANKS—Stainless, GL., Lined, Steel.

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1—Oliver 74"x51" Rotary Vac. Filter, with agitated tank, motors, etc. All Stainless Steel contact parts.
1—Stokes Model 294 single punch Tablet Press with 7½ h.p. vari-drive.
2—Stokes "DDS2" Rotary Tablet Machines, each with 5 h.p. vari-drive.
1—American 36"x42"x84" lg. double door steam jacketed Sterilizer.

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1—Morehouse model A-400 Hy-R-Speed mill, 20 HP.

1—F. J. Stokes model R-4 tablet press.

2—Mikro pulverizers models 3-TH, 2-TH.

1—Williams "Zenith" 3 roller mill.

1—40" suspended centrifuge with perforated rubber basket.

6—Pebble mills 400, 250, 125, 100, 50, 15 gallons.

1—Hersey 1½' x 16' steel hot air rotary dryer.

2—J. H. Day model 4-B 125 gallon gearless pony mixers.

1—Porter 4'6" double cone blender, 29 cu. ft.

1—Patterson kneadermaster, 25 gallons, 30 HP.

1—Glascote 550 gallon glass lined tank.

1—Stokes vacuum shelf dryer model 138-B, stainless steel shelf.

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B&P Ter Meer 530 Centrifuge 316 S.S.
Sharples C-27 Centrifuge 316 S.S.
Eimco 4'x2' Rotary Dewaterer 316 S.S.
S.S. Centrifix Eliminator 42"x12'6".
Sparkler 33-D-12 Filter, 316 S.S.
Sparkler 18-D-8 Filter, 316 S.S.
Swenson 24"x20' jkt. S.S. Crystallizers.
Swenson Evaporator 425 sq. ft. Stainless.
Absorber Column 18'x66' Stainless.
Bubblecap Columns 7'x25'—8 trays; 5'x88'—35 trays; 3'x38'—35 trays.
Baker Perkins 18DIM 300 gal. Mixer.
100 Steel Tanks 1000 to 350,000 gal.
Lummus Furnace 4 Million BTU.
11'6"x34' & 14'x24' Crude Still, welded.
Penna. SX13 Hammermills, 400 HP.
Heil Patterson Crushers, 100 HP.
Koppers 36"x42"—2 Roll Crushers.
Centrif. Blowers 23M; 29M; 50M, CFM.
10,000 ft. Trough Conveyor 30"; 36"; 42".
Stainless Centrif. Pumps 2"x2" to 6"x5".
Patterson Uni-Power Drives 1 to 20 HP.

Stainless Type 316 Tanks

17,500 gal. 15'x16'OA Flat top, cone bot.
11,500 gal. 12'x15'OA cone bot. 15 HP Agit.
10,500 gal. 10'x23'OA dish top, cone bot.
5,200 gal. 9'x11' open top, flat bot.
4,000 gal. 8'6"x10'6"OA Dished Heads.
1,000 gal. 5'x8' open top, cone bot. 3 HP Agit.
400 to 850 gal. (10), Some Agitated.

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BANKRUPTCY SALE

United States District Court: Southern District of New York. Re: In the matter of Chemo Puro Manufacturing Corp., Bankrupt, # 60 B 551. Pursuant to an order of the Honorable Herbert Lowenthal, referee in bankruptcy, John A. O'Grady, Auctioneer, sells Tuesday, December 6th, 1960, at 10:00 a.m., at 150 Doremus Avenue, Newark, New Jersey, complete modern chemical mfg. plant: Machinery; centrifuges, filters, dryers, tanks, reactors, pumps, agitators, grinders, condensers. All machinery in excellent condition. Complete laboratory equipment: Office furniture; all modern steel exec. & secty. desks, chairs, electric typewriters, adding machines, calculators, photo copiers, etc. Complete and up to date chemical library: Inventory; Tremendously large inventory of Chemical Raw Material and Finished Products. Inspection: On premises—December 3rd, 4th, and 5th, 1960, from 10:00 a.m. to 4:30 p.m. For information: Wire or call or write, John A. O'Grady, Auctioneer, 40 Bayview Avenue, Jersey City, New Jersey, Delaware 3-6323.

CONTRACT WORK WANTED

Belgium chemical plant in Brussels area alongside canal to Antwerp, with equipment for processing of liquids and powders (grinding, drying, milling, blending, packing, etc . . .) wishes to diversify present production range or start new industrial activities covering Common Market countries. All types of co-operation (license, contract manufacturing or others) will be considered. All communications received will be treated confidentially. OPD 171.

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Continuous Stripping Column 2 x 13.
Aluminum Evaporator, Calandria type, 1300 sq. ft.
Ribbon Blenders, Hydraulic Pumps.

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800 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

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Our company has long established national sales representation to the paint, plastic, printing ink and other protective and decorative coating industries We want additional items on exclusive basis We are willing to make a substantial investment if necessary. OPD 150.

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Advertisers' Index

Acme Hardesty Co. 52
Alan Wood Steel Company 43
Allied Chemical Corporation, General Chemical Division 16
Allied Chemical Corporation—Plastics Division 41
American Agricultural Chemical Co., The. 1
American Cyanamid Company, Intermediates Department 38
American Lignite Products Co. 50
American Maize-Products Company 38
American Mineral Spirits Company 60
Amoco Chemicals Corporation 15
Ashcraft-Wilkinson Co. 35

Baker, H. J., & Bro. 52
Baker, J. T., Chemical Co. 1
Barclay Chemical Company, Inc. 58
Basic, Inc. 34
Becco Chemical Division, Food Machinery & Chemical Corp. 32, 34
Berkshire Chemicals, Inc. 31
Biddle Sawyer Corp 37
Bios Laboratories, Inc. 46
Blockson Chemical Company 32
Bower, Henry, Chemical Mfg. Co. 32
Bowman, Charles, & Co. 47
Brill Equipment Company 56
Brode Corporation, The 52
Bunge Corporation 52

California Chemical Company, Oronite Division 27
Celanese Corporation of America, Chemical Division 60
Chemical & Process Machinery Corp. 57
Chemical Service Corp. 58
Chemical Solvents, Inc 60
Chemsol, Inc. 58
Church & Dwight Co., Inc. 25
Clarke, John, & Co., Inc. 47
Clintbrook Chemical Company 46
Columbia Southern Chemical Corporation. 31
Commercial Solvents Corporation 6
Concord Chemical Company 60
Conray Products Co., Div. 60
Coupe, Robert A. 34
Cowles Chemical Company 60

Distillation Products Industries Div. of Eastman Kodak Company 37
Dow Corning Corporation 26
Dunkel, Paul A., & Company, Inc. 47
DuPont de Nemours, E. I., & Co. (Inc.) 42
Duval Sulphur & Potash Co. 35

Eastman Chemical Products, Inc. 17
Emery Industries, Inc. 50
Enjay Chemical Company, A Division of Humble Oil & Refining Company 21
Equipment Clearing House, Inc. 55

Fezandie & Sperrle 38
First Machinery Corp. 55
Florasynth Laboratories, Inc. 48
Fritzsche Brothers, Inc. 48

Gane's Chemical Works, Inc. 46
Gelb, R., & Sons, Inc. 54, 57
General Equipment & Trading Co. 54
General Mills, Inc. 39
Gillespie-Rogers-Pyatt Co., Inc. 39
Givaudan-Delawanna, Inc. 49
Gold Leaf Pharmacal Co., Inc. 47
Greeff, R. W., & Co. 1, 44
Gross, A., & Company 52
Gulf Oil Corporation 36

Halby Chemical Co., Inc. 33
Harchem Division, Wallace & Tiernan, Inc. 38
Harshaw Chemical Co., The 45
Heat & Power Co., Inc. 55, 57
Heico, Inc. 33
Hercules Powder Company, Incorporated. 23, 43
Hoffmann-La Roche, Inc. 44, 49
Hooker Chemical Corporation 33
Hutchinson, D. W., & Co., Inc. 48

International Petrosolvents, Inc. 37

Jasper Machinery Company, Inc. 54

Kay-Fries Chemicals, Inc 36
Koppers Company, Inc., Tar Products Division 40

Lawler Company 55
Lebanon Chemical Co. 34
Lemke, B. L., & Co., Inc. 46
Lever Brothers Company 36
Loeb, H., & Son 54
Loeb Equipment Supply Co. 54
Lucidol Division, Wallace & Tiernan, Incorporated 38

Machinecraft Corp. 55, 58
Machinery & Equipment Company 54, 55, 57
Machinery & Equipment Co., The 55
Magnus, Mabee & Reynard, Inc. 48
Mallinckrodt Chemical Works 10, 11
Manion Steel Barrel Company 32
Mississippi Lime Company 34
Mutual Citrus Products Company 19

National Casein 38
Nepera Chemical Co., Inc. 47
New Jersey Zinc Company, The 50

Olin Mathieson Chemical Corporation Chemicals Division 37
Osborn, C. J., Co. 38

Page, Charles, & Co., Inc. 37
Pan American Sulphur Company 32
Penick, S. B., & Company 45, 48
Pennsalt Chemicals Corporation, Industrial Division 1
Pennsylvania Refining Company 52
Perry Equipment Corp. 56
Philipp Brothers Chemicals, Inc. 35
Pitt-Consol Chemical Co. 13
Plastics Division, Allied Chemical Corporation 41
Potash Company of America 35
Prior Chemical Corporation 1
Process Plants Service, Inc. 54
Procter & Gamble Co. 36
Publicker Industries, Inc. 37
Pure Carbonic Co. 33

Rambach Chemical Company 58
Raney Catalyst Co. 37
Read, Chas. L., & Co., Inc. 38
Republic Chemical Corporation 34
Republic Steel Corporation 41
Richter, Gedeon Pharmaceutical Products, Inc. 47
Ross, F. H., & Co. 31

Foster D. Snell, Inc. 60
Stein Equipment Co. 57
Strohmeyer & Arpe Co. 52
Sunkist Growers, Inc. 18
Texas Gulf Sulphur Co., Inc 32
Turner, Joseph, & Co. 34

Ungerer & Co. 49
Union Carbide Chemicals Company, Division of Union Carbide Corporation 2
Union Standard Equipment Co 55
U. S. Borax & Chemical Corporation 1
U. S. Steel Corp. 42
United Ultramarine & Chemical Company, Inc. 38

Verona Aromatics, A Division of Verona-Pharma Chemical Corp. 49
Verona-Pharma Chemical Corporation 43

Warwick Wax Division, The Western Petrochemical Corporation 51
West End Chemical Company, Division of Stauffer Chemical Company 24
Western Condensing Co. 20
Will & Baumer Candle Co., Inc. 52
Wolf, Bill, Inc. 57
Wood Ridge Chemical Corporation 32
Wyandotte Chemicals Corporation 32, 34

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BUYERS DIRECTORY: Helen Lohse
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DALLAS (DAvis 1-0898)—John Printup & Associates, 2607 Milmar Drive, Dallas 28, Tex.
LOS ANGELES (DUnkirk 7-4388) — Robert W. Walker Company, 730 South Western Avenue, Los Angeles 5, Calif.
SAN FRANCISCO (SUtter 1-5568) — Robert W. Walker Company, 57 Post Street, San Francisco

Chemical Patents

—Continued from page 5

those countries, and noted that this presented American companies with a dilemma:

"Shall they file applications in all countries of the Common Market, or shall they assume that under whatever common system is eventually established it will at that time be possible to extend any of their European patents to the entire territory?"

He found that most US companies were basing their decisions on the assumption that the ECM would, for its own objectives, permit a common registration.

Austin S. Phillips, staff assistant in the patents and licenses department of American Cyanamid Company, turned to problems of protecting an overseas patent and realizing maximum benefit from it.

The Patent Vacuum

One such problem he found in the so-called called "patent vacuum" of the world—the Iron Curtain countries and, as far as drugs are concerned, Italy.

In such countries and in countries where patents have not been applied for, a company's product may be manufactured and exported into countries in which the company does have a patent.

In cases of outright infringement, he noted, a company's local attorney may be able to arrange for customs to deny entry of an infringing article. In most jurisdictions, however, it has been found necessary to bring suit for infringement in the courts.

Some countries provide for preliminary or temporary injunctions, it was pointed out. Japan is one of these. In others, such as France and Germany, it is possible to bring summary action seizing the alleged infringing goods, followed by infringement suits.

Drug Firms Selling

—Continued from page 7

the Public Health Service by OCDM to insure health services for the civilian population in the event of major disaster or national emergency.

The Division of Health Mobilization is coordinating all mobilization preparedness activities assigned to the Public Health Service.

Included in the division's programs are the development of an Emergency Health Service to function during a national mergency; training courses for medical and health professions; self-help procedures for individual survival; institution of an emergency water plan, research into standardized medical treatment procedures for use with austere resources; management of health resources, including manpower, supplies, and facilities; assistance to governmental and non-governmental agencies, states and local communities in developing disaster capabilities.

IMPORTS at United States Ports

New York

AGAR—40 dms, Contell Co, Santander
20 dms, T M Duche & Son, Santander
ALUMINUM HYDROXIDE, GEL—63 cks, Marseille
24 bgs, Marseille
m-AMINOPHENOL—3 dms, Bremen
AMMONIUM CARBONATE—60 cs, American British Chemical Supplies, Glasgow
230 cs, American Agricultural Chemical Co, Glasgow
83 dms, American Firstoline Corp, Rotterdam
AMMONIUM PERSULFATE—200 dms, Bankers Trust Co, Rotterdam
AMMONIUM THIOSULFATE—3 dms, Interstate Universal Inc, Bremen
ANILINE DYES—20 dms, H Bruckmann & Lorbacher, Bremen
45 dms, Heemsoth Kerner, Liverpool
AMYRIS OIL—10 dms, Port Au Prince
16 dms, Arondy Corp, Liverpool
29 dms, Carbic Hoechst Corp, Rotterdam
56 dms, Rotterdam
ANISE SEED—100 bgs, Izmir
ANNATTO SEED—38 bgs, Foreign Domestic Distributors, Callao
84 bgs, Peter Andrea Corp, Fortaleza
ANTIMONY—20 cks, Watson Geach, Liverpool
ANTIMONY OXIDE—605 bgs, National Lead Co, Liverpool
ANTIMONY REGULUS—1,099 cs, Rijeka
APRICOT KERNELS, BITTER—100 bgs, Fehr Bros, Istanbul
ARABIC GUM—453 bgs, Irving Trust Co, Port Sudan
2,466 bgs, Bank of N Y, Port Sudan
250 bgs, Chemical Bank, Port Sudan
150 bgs, Stein Hall & Co, Port Sudan
100 bgs, Port Sudan
ASBESTOS FIBER—2,600 bgs, Johns Manville Corp, Durban
ASCORBIC ACID—9 dms, Lang Co, Antwerp
BEESWAX—100 bgs, Kane Import Corp, Buenos Aires
25 bgs, Machado & Co, Ciudad Trujillo
23 bgs, Lenape Trading Co, Port Au Prince
29 bgs, Baldini & Co, Tampico
62 bgs, H H Pike & Co, Tampico
200 bgs, Poons Co, Valparaiso
54 blks, Frank B Ross, Djibouti
201 bls, Djibouti
106 bgs, Tampico
68 bgs, Lobito
BENZOCAINE—53 dms, Hostachem Corp, Bremen
BENZOIN GUM—50 cs, Lo Curto & Funk, Singapore
BENZOSULFIMIDE—40 dms, Frank Samuel & Co, Yokohama
BILE ACIDS—8 dms, Merck & Co, Buenos Aires
BLANC FIXE—2,000 bgs, C J Osborn Co, Rotterdam
BLEACHING POWDER—225 dms, Chemical Manufacturing Co, Liverpool
BOIS DE ROSE OIL—7 dms, Northam Trading Co, Callao
15 dms, Solbern Representation, Iquitos
10 dms, Ungerer & Co, Iquitos
10 dms, Gillespie & Co, Iquitos
1 dm, Hollander Trading Corp, Manaus
BONE ASH—100 bgs, Hamburg
BRONZE POWDER—25 dms, Crescent Bronze Powder Co, Hamburg
22 dms, Bremen
CALCIUM CARBONATE—1,205 bgs, N H Weitzner, Antwerp
6,800 bgs, Whittaker Clark & Daniels, Liverpool
1,120 bgs, Smith Chemical & Color Co, Liverpool
1,000 bgs, Hammill & Gillespie, Liverpool
982 bgs, Pluess Staufer, Antwerp
CANANGA OIL—1 dm, Rotterdam
CANDELILLA WAX—313 bgs, Tampico
CARAWAY SEED—200 bgs, R J Spitz, Rotterdam
200 bgs, Hoger Corp, Rotterdam
100 bgs, I Grob, Rotterdam
100 bgs, Ideal Trading Co, Rotterdam
100 bgs, Biddle Purchasing Co, Rotterdam
CARDAMOMS—22 cs, Fritzsche Bros, Colombo
CARNAUBA WAX—167 bgs, Cornelius Wax Refining Corp, Fortaleza
111 bgs, Wm Diehl & Co, Fortaleza
CASEIN—500 bgs, F C Gerlach, Buenos Aires
1,000 bgs, Tupman Thurlow, Buenos Aires
500 bgs, N Y Sancor Corp, Buenos Aires
200 bgs, F H Paul & Stein Bros, Buenos Aires
2,000 bgs, J R Spellacy, Melbourne
CASHEW NUT SHELL LIQUID—47 tons, Minnesota Mining & Manufacturing Co, Cochin
148 tons, Minnesota Mining & Manufacturing Co, Mangalore
336 tons, Minnesota Mining & Manufacturing Co, Lourenco Marques
CASSIA—250 bls, Van Norden & Co, Saigon
2,976 bls, K H Landes & Co, Saigon
300 bls, Hismoco American Co, Saigon
CASTOR BEANS—1,000 bgs, Woodward & Dickerson, Asuncion
CASTOR OIL—98 tons, Chemical Bank, Rijeka
240 tons, Salvador
CELERY SEED—170 bgs, Louis Furth, Bombay
85 bgs, Hismoco American Co, Bombay
CETYL ALCOHOL—100 dms, Olympic Shipping Co, Liverpool
CETYL STEARYL ALCOHOL—600 bgs, A & S Corp, Yokohama
CETYL BROMIDE—5 dms, Heemsoth Kerner, Liverpool
CHLORAL HYDRATE—10 cks, Marseille
CHLORINATED RUBBER—200 bgs, C M C Chemicals Inc, Liverpool
CINNAMON QUILLS—50 bls, Curacao Trading Co, Colombo
55 bls, Hismoco American Co, Colombo
50 bls, Max Van Pels, Colombo
CITRONELLA OIL—75 dms, Givaudan Corp, Keelung
10 dms, George Uhe Co, Keelung
25 dms, Swiss Credit Bank, Keelung
25 dms, Doran & Schmiedel, Keelung
15 dms, Holland Colombo Trading Society, Keelung
50 dms, Keelung
CLAY, BALL—1,940 bgs, United Clay Mines Corp, Avonmouth
CLAY, CHINA—896 bgs, Anglo American Clay Corp, Avonmouth
CLOVE—450 bgs, L A Champon & Co, Mombasa
100 bgs, Hismoco American Co, Mombasa
400 bgs, National City Bank, Zanzibar
200 bgs, Zanzibar
COBALT OXIDE—355 cks, Antwerp
COCONUT OIL—400 tons, American Trust Co, Zamboanga
585 tons, American Trust Co, Cebu
430 tons, Cebu
COLORS, DRY—40 dms, United Mineral & Chemical Corp, Liverpool
COPAIBA BALSAM—5 dms, Peter Andrea Corp, Manaus
12 dms, Sterling National Bank, Manaus
COPAL GUM—120 bgs, Gillespie Roger Pyatt, Macassar
75 bkts, S Winterbourne & Co, Macassar
62 bkts, O G Innes Corp, Macassar
64 bgs, Wm H Scheel, Macassar
147 bkts, Macassar
COPPER CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
CORIANDER OIL—2 cs, Rijeka
CORIANDER SEED—250 bgs, Buenos Aires
CORN OIL—220 tons, Corn Products Co, Rotterdam
CORN STARCH—2,900 bgs, Impex Agricultural Corp, Rijeka
972 bgs, Rotterdam
CREAM OF TARTAR—400 bgs, T M Duche & Son, Genoa
o-CRESOTINIC ACID—15 kgs, H A Gogarty, Liverpool
CROTONIC ACID—52 dms, Wedeman & Godknecht, Bremen
CRYOLITE, SYNTHETIC—273 bgs, Venice
CUBE ROOT—1,375 bls, Merton Trading Co, Iquitos
CYANURIC CHLORIDE—50 dms, Fallek Products Co, Yokohama
DAMMAR GUM—25 cs, Wm H Scheel, Bangkok
128 bgs, S Winterbourne & Co, Singapore
DEGRAS—5 dms, James E Fox, Genoa
160 dms, H A Gogarty, Nagoya
92 dms, Malmstrom Chemical Corp, Nagoya
40 dms, Robinson Wagner Co, Liverpool
5 dms, Olympic Shipping Co, Liverpool
DYES, COALTAR—92 dms, H Bruckmann & Lorbacher, Hamburg
89 dms, Orlex Dyes & Chemical Corp, Hamburg
39 dms, Sandoz Inc, Rotterdam
EARTH COLORS—477 bgs, Reichard Coulston, Larnaca
675 bgs, Naftone Inc, Bremen
EPHERDINE HYDROCHLORIDE—10 cs, Burroughs Wellcome & Co, Liverpool
EPHERDINE ALKALOID—2 cs, Havre
FUEL OIL—84,272 bbls, Hess Inc, San Lorenzo
135,245 bbls, Metropolitan Petroleum Corp, Puerto La Cruz
135,020 bbls, Signal Oil & Gas Co, Las Piedras
219,209 bbls, Shell Caribbean Petroleum Co, Punta Cardon
119,640 bbls, Royal Petroleum Co, Curacao
122,861 bbls, Hess Inc, Puerto La Cruz
172,759 bbls, Humble Oil Co, Las Piedras
323,173 bbls, Humble Oil Co, Aruba
229,781 bbls, Humble Oil Co, Caripito
FULLERS EARTH—400 bgs, L A Salomon & Bro, Avonmouth
GELATIN—200 dms, Franco Belgian Corp, Liverpool
73 dms, B Young, Liverpool
73 dms, B Young, Avonmouth
60 bgs, B Young, Avonmouth
200 bgs, T M Duche & Son, Antwerp
200 bgs, Manhattan Adhesives Corp, Hamburg
400 bgs, First National Boston, Hamburg
260 bgs, United Hat Fur Cutting Co, Leghorn
20 bls, Roberts Rouge Co, Marseille
GERMANIUM OXIDE—20 cs, Antwerp
GINGER—56 bgs, J H Elton, Kingston
76 bgs, Van Loan & Co, Kingston
GLUE—20 bgs, Putnam Chemical Corp, Bremen
400 bgs, Manhattan Adhesives Corp, Hamburg
1,350 bgs, Jung Forwarding Co, Liverpool
300 bgs, Jung Forwarding Co, Avonmouth
GRAPHITE—285 bgs, Joseph Dixon Crucible Co, Colombo
500 bgs, Superior Graphite Co, Colombo
GUAR GUM—2,424 bgs, Stein Hall & Co, Karachi
200 bgs, Meer Corp, Genoa
10 bgs, Colony Import & Export Corp, Genoa
GYPSUM—1,200 bgs, Whittaker Clark & Daniels, Liverpool
GYPSUM, CRUDE—20,036 tons, U S Gypsum Co, Hantsport
2,570 tons, National Gypsum Co, Walton
L-HISTIDINE MONOHYDROCHLORIDE — 1 cs, Byron Chemical Co, Kobe
HOOF & HORNMEAL—600 bgs, A M Goldstein, Santos
HYDRAZINE HYDRATE—20 pails, E F Drew, Bremen
HYDROXYCITRONELLAL—3 dms, Fleuroma Inc, Marseille
6 cks, George Uhe Co, Marseille
IODINE, CRUDE—100 dms, Bunge Corp, Yokohama
40 dms, Yokohama
IRON BLUE—74 dms, Van Oppen & Co, Liverpool
IRON OXIDE—2,174 bgs, Reichard Coulston, Malaga
1,305 bgs, Landers Segal Color Co, Malaga
400 bgs, Malaga
JUNIPER BERRIES—154 bgs, Irving Trust Co, Leghorn
154 bgs, Leghorn
KARAYA GUM—62 bgs, Tragacanth Importing Co, Bombay
61 bgs, Colony Import & Export Corp, Bombay
KOLA NUTS—312 bgs, D Steengrafe & Co, Kingston
LACTIC ACID—50 dms, A Millner & Co, Liverpool
LACTOSE—235 dms, Chas L Huisking & Co, Liverpool
LAUREL WAX—50 bgs, Strohmeyer & Arpe, Buenaventura
LEMON OIL—1 dm, Felton Chemical Co, Vera Cruz
6 dms, Ungerer & Co, Vera Cruz
5 dms, Fritzsche Bros, Vera Cruz
LEMONGRASS OIL—30 dms, George Uhe Co, Cochin
12 dms, International Flavors & Fragrances Inc, Cochin
17 dms, Fritzsche Bros, Cochin
LIME OIL—3 dms, Citrus & Allied Essential Oil Co, Puerto Plata
7 dms, Canada Dry Corp, Hamilton
LIVER CONCENTRATE—17 dms, Wilson & Co, Buenos Aires
LIVER PASTE—6 dms, Reheis Co, Montevideo
LIVER POWDER—34 dms, Reheis Co, Montevideo
LOCUST BEANS—200 bgs, Norwalk Mills, Larnaca
100 bgs, Meer Corp, Larnaca
310 bgs, S B Penick & Co, Larnaca
LOCUST BEAN GUM—300 bgs, T M Duche & Sons, Rotterdam
100 bgs, Meer Corp, Genoa
224 bgs, Stein Hall & Co, Genoa
400 bgs, Brown Bros, Valencia
1,180 bgs, J L Quesada, Portimao
100 bgs, Irving Trust Co, Portimao
200 bgs, Portimao
LUBRICATING OIL ADDITIVE—100 dms, Castrol Oils Inc, Liverpool
MACE—42 cs, Superintendence Co, Macassar
28 cs, Foreign Domestic Sales Corp, Singapore
MAGNESIUM CARBONATE—10 cs, F J Markwalter & Co, Marseille
200 bgs, Reheis Co, Liverpool
MAGNESIUM HYDROXIDE—40 bgs, Reheis Co, Liverpool
MENTHOL—45 cs, Magnus Mabee & Reynard, Keelung
15 cs, Fleischman Burd & Co, Keelung
115 cs, George Uhe Co, Marseille
22 dms, Chase Manhattan Bank, Marseille
25 dms, Marseille
MERCURY—100 flks, Leghorn Trading Co, Leghorn
30 flks, Vera Cruz
MINERAL LUBRICATING OIL—25 cs, N Y & N J Lubricant Co, Glasgow
MOLASSES—1,032 tons, Pacific Molasses Co, Salaverry
MONOSODIUM GLUTAMATE—300 dms, Ajinomoto Co, Yokohama
MUHUHU OIL—9 dms, Tanga
MUSK, ARTIFICIAL—20 dms, Lo Curto & Funk, Rotterdam
MUSTARD OIL—11 cs, Schimmel & Co, Hamburg
MYRABOLANS EXTRACT—325 bgs, Tanimex Corp, Liverpool
NAPHTHALENE—333 bgs, J N Forker, Avonmouth
1,145 bgs, Marine Midland Trust Co, Avonmouth
NAPHTHOL—4 dms, H Bruckmann & Lorbacher, Bremen
NICOTINAMIDE—40 dms, Fallek Products Co, Genoa
NUTMEG—68 bgs, Superintendence Co, Macassar
12 bgs, Gillespie & Co, Port of Spain
28 bgs, Hismoco American Co, Singapore
20 bgs, V A Cordovi, Colombo
125 bgs, Chase Manhattan Bank, Singapore
267 bgs, Macassar
OJEFICIN POWDER—12 dms, Astoria Panamericana, Iquitos
OLIVE OIL—440 dms, Swiss Credit Bank, Malaga
50 dms, Hanover Bank, Malaga
50 dms, Manufacturers Trust Co, Seville
50 dms, Atlantic Bank of N Y, Seville
25 dms, Chase Manhattan Bank, Seville
98 dms, Bankers Trust Co, Seville
98 dms, Irving Trust Co, Cadiz
50 dms, C Orlando, Seville
73 dms, Moliniers N Y Inc, Seville
ORANGE OIL—4 dms, Citrus & Allied Essential Oils Co, Puerto Plata
ORRIS ROOT—20 bgs, Irving Trust Co, Leghorn
OURICURY WAX—45 bgs, Cornelius Wax Refining Corp, Salvador
PALO SANTO OIL—34 cs, C Tennant Sons & Co, Buenos Aires
33 cs, Asuncion
PAPAIN—60 cs, Chas L Huisking & Co, Mombasa
48 cs, V A Cordovi, Colombo
PAPRIKA—175 bgs, A A Sayia, Alicante
100 bgs, H Schlicting, Alicante
600 bgs, J Weinstein, Alicante
100 bgs, Alicante
PEPPER, BLACK—70 bgs, Internatio Rotterdam, Singapore
280 bgs, A G Dunn, Singapore
140 bgs, East India Trading Co, Singapore
70 bgs, California Commodities Corp, Singapore
470 bgs, J H Elton, Singapore
140 bgs, Otto Gerdau, Singapore
700 bgs, Singapore
PEPPER, RED—135 bgs, P H Petry, Mombasa
112 bgs, Kobe
PEPPER, WHITE—520 bgs, Singapore
PERCHLOROETHYLENE—125 dms, International Selling Corp, Marseille
PETIT GRAIN OIL—6 dms, J M Rodriguez, Asuncion
24 dms, Hollander Trading Corp, Asuncion
17 dms, Asuncion
PETROLEUM, CRUDE—430,526 bbls, California Oil Co, Sidon
157,234 bbls, Sun Raymid Continent Oil Co, La Salina
180,240 bbls, Humble Oil Co, Las Piedras
73,189 bbls, Humble Oil Co, Puerto Miranda
PHOSPHORIC ACID—1 cs, Phosphate Rock Export, Genoa
a-PICOLINE—25 dms, International Chemical Corp, Liverpool
PIMENTO—177 bgs, E A Johnson & Co, Coatzacoalcos
199 bgs, F D Keller & Son, Coatzacoalcos
PIMENTO LEAF OIL—3 dms, Fritzsche Bros, Kingston
POLLACKLIVER OIL—62 dms, Interocean Chemical & Minerals Corp, Yokohama
POPPYSEED—200 bgs, Hoger Corp, Rotterdam
250 bgs, H Rubinoff & Co, Rotterdam
350 bgs, C M Van Sillevoldt, Rotterdam
POTASSIUM CYANIDE—60 dms, D Hauser, Hamburg
POTASSIUM METABISULFITE—4 cs, A Gusmer, Liverpool
POTASSIUM NITRATE—360 bgs, Venice
POTASSIUM SILICOFLUORIDE—680 bgs, Liverpool
PROCAINE PENICILLIN—7 cs, Merck & Co, Manila
PSYLLIUM SEED, HUSKS—372 bgs, P H Petry, Marseille
150 bgs, Forvent Co, Bombay
PYRETHRUM EXTRACT—50 dms, Mombasa
PYRIDINE—10 dms, Van Oppen & Co, Avonmouth
QUEBRACHO EXTRACT—5,056 bgs, American Tanners Ltd, Buenos Aires
250 bgs, Tan American Corp, Buenos Aires
498 bgs, International Products Corp, Buenos Aires
526 bgs, Tanimex Corp, Buenos Aires
QUINIDINE SULFATE—5 dms, Chas L Huisking & Co, Hamburg
RESIN, NATURAL—140 bgs, S Winterbourne & Co, Singapore
RHUBARB ROOT—40 bgs, Calcutta
d-RIBONLACTONE—15 dms, Hoffmann-La Roche Inc, Hamburg
RUTIN—30 dms, S B Penick & Co, Sydney
SAGE LEAVES—232 bls, K H Werthon, Trieste
300 bls, F N S Corp, Trieste
1,000 bls, Rijeka
SAGO FLOUR—571 bgs, Stein Hall & Co, Singapore
277 bgs, Singapore
SEEDLAC—500 bgs, Colony Import & Export Corp, Bangkok
750 bgs, Haeuser Shellac Co, Bangkok
150 bgs, Wm Zinsser & Co, Calcutta
200 bgs, Manfrose Corp, Calcutta
500 bgs, Calcutta
SHELLAC—290 bgs, National City Bank, Hamburg
110 bgs, F H Paul & Stein Bros, Bremen
375 bgs, Calcutta
SILICA, AMORPHUS—5 dms, Catalyst Development Corp, Genoa
SODIUM CYANIDE—400 dms, Chemical Manufacturing Co, Liverpool
SODIUM CYCLAMATE—33 cs, Gallagher & Ascher, Yokohama
SODIUM PERBORATE MONOHYDRATE—200 bgs, Independent Chemical Corp, Bremen
SODIUM PERBORATE TETRAHYDRATE—300 bgs, Chemical Manufacturing Co, Liverpool
SODIUM PEROXIDE—108 dms, Chemical Manufacturing Co, Liverpool
STRYCHNINE POWDER—27 bgs, S B Penick & Co, Madras
TALC—1,231 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—2,128 bgs, Poons Co, Kohsichang
9,212 bgs, Stein Hall & Co, Kohsichang
2,436 bgs, Geismar Co, Kohsichang
555 bgs, Manhattan Adhesives Corp, Penang
890 bgs, Woodward & Dickerson, Kohsichang
2,646 bgs, Stein Hall & Co, Imbituba
672 bgs, Morningstar Paisley Inc, Bangkok
4,592 bgs, Stein Hall & Co, Bangkok
9,560 bgs, Morningstar Paisley Inc, Kohsichang
7,228 bgs, Tapioca Associates, Kohsichang
TAR ACID—4 dms, Van Oppen & Co, Avonmouth
TARTARIC ACID—3,500 bgs, Leonhardt & Brush, Barcelona
TERPIN HYDRATE—50 cks, Bordeaux
TETRAALKYLTHIOPYROPHOSPHATE — 21 dms, Plant Products Corp, Bremen
THEOBROMINE—11 dms, George Uhe Co, Rotterdam
THEOPHYLLINE—50 cks, Havre
TONKA BEANS—200 cks, Machado & Co, Port of Spain
TRAGACANTH GUM—28 bgs, Meer Corp, Khorramshahr
TRICHLOROETHYLENE—200 dms, Chemical Manufacturing Co, Liverpool
200 tons, International Selling Corp, Marseille
UREA, SYNTHETIC—2,576 bgs, Chemical Manufacturing Co, Liverpool
VANILLA—20 dms, Zink & Trieste, Marseille
VANILLA BEANS—17 cs, Gillespie & Co, Mombasa
28 cs, Mombasa
VANILLIC ACID DIETHYLAMIDE—2 cs, U S Vitamin & Pharmaceutical Corp, Hamburg
VEGETABLE OIL, HYDROGENATED—200 cs, Royal Bank of Canada, Liverpool
WATTLE EXTRACT—560 bgs, Barkey Importing Co, Mombasa
WAX—100 bgs, A Fahner, Hamburg
ZINC OXIDE—1,000 bgs, Aceto Chemical Co, Liverpool
40 bgs, Aceto Chemical Co, Avonmouth
1,600 bgs, Pigment & Chemical Co, Avonmouth
ZINC SULFIDE—200 bgs, C J Osborn Co, Rotterdam
ZIRCON SAND—2,400 bgs, International Titanium Corp, Brisbane
535 bgs, Lo Curto & Funk, Brisbane

Los Angeles

AMMONIUM NITRATE—12,500 bgs, Wilson & Geo Meyer & Co, Heroya
ASBESTOS FIBER—4,000 bgs, Johns Manville Corp, Durban
CALCIUM NITRATE—12,000 bgs, Wilson & Geo Meyer & Co, Heroya
CASEIN—20 bgs, J R Spellacy, Sydney
CODLIVER OIL—10 dms, Peder Devold Oil Co, Stavenger
COPRA—3,100 tons, Wells Fargo Bank, Cebu
500 tons, Wells Fargo Bank, Zamboanga
1,000 tons, Procter & Gamble Co, Medina
CORN STARCH—100 bgs, Geismar & Co, Amsterdam
FISHMEAL—1,630 bgs, Albumina Supply Co, Chimbote
PEPPER, WHITE—60 bgs, C Czarinkow, Singapore
PEPPERMINT LEAVES—68 cs, C F Teneyck & Co, Hamburg
PETROLEUM, CRUDE—333,469 bbls, Standard Oil Co, Rastanura
SODIUM FERROCYANIDE—400 bgs, J London, Antwerp
TAPIOCA FLOUR—3,136 bgs, Stein Hall & Co, Bangkok
1,120 bgs, Morningstar Paisley Inc, Bangkok
UREA—12,500 bgs, Wilson & Geo Meyer & Co, Heroya

Philadelphia

ASBESTOS FIBER—400 bgs, Chas Kurz & Co, Port Elizabeth
1,880 bgs, Chas Kurz & Co, Mombasa
500 bgs, Davies Turner, Mombasa
1,000 bgs, Davies Turner, Durban
BONE—5,155 bgs, Ossa Corp, Buenos Aires
92 bgs, Tupman Thurlow, Rio de Janeiro
4,785 bgs, A M Goldstein, Buenos Aires
CAMPHOR POWDER—50 cs, Keelung
CASHEWNUT SHELL LIQUID—10 dms, Polyrez Inc, Cochin
ETHYL ALCOHOL—4,127 tons, Williams & Co, Recife
FUEL OIL—97,658 bbls, Hess Inc, Punta Cardon
GYPSUM, CRUDE—15,684 tons, U S Gypsum Co, Hantsport
10,878 tons, National Gypsum Co, Halifax
LICORICE EXTRACT—2,500 cs, Wm E Martin & Son, Izmir
MENTHOL—255 cs, Chase Manhattan Bank, Keelung
OLIVE OIL—30 dms, Chase Manhattan Bank, Seville
PERCHLOROETHYLENE—50 dms, International Selling Corp, Bombay
PETROLEUM, CRUDE—149,826 bbls, Gulf Oil Corp, Bachaquero
251,600 bbls, Atlantic Refining Co, Puerto La Cruz
115,454 bbls, Atlantic Refining Co, Caripito
280,331 bbls, Gulf Oil Corp, Banias
236,727 bbls, Gulf Oil Corp, Puerto La Cruz
560,443 bbls, Gulf Oil Corp, Mina Al Ahmadi
112,999 bbls, Humble Oil Co, Las Piedras
117,000 bbls, Esso Standard Oil Co, Baytown
431,289 bbls, Mobil Oil Co, Mina Al Ahmadi
375,042 bbls, Ohio Oil Co, Punta de Palmas
222,394 bbls, Texaco Co, Covenas
112,209 bbls, Continental Oil Co, San Lorenzo
PYRETHRUM FLOWERS—625 bls, Mombasa
QUEBRACHO EXTRACT—2,184 bgs, Tan American Corp, Buenos Aires
SODIUM ANTIMONATE—710 bgs, Hamburg
VANILLA BEANS—121 cs, Camax Co, Vera Cruz

San Francisco

BONEMEAL—400 tons, Stauffer Chemical Co, Buenos Aires
CARAWAY SEED—100 bgs, California Commodities Corp, Rotterdam
CASEIN—850 bgs, E Lang, Buenos Aires
112 bgs, J R Spellacy, Sydney
COPRA—1,500 tons, Cargill Inc, Cebu
1,140 tons, Cargill Inc, Castanas
CREAM OF TARTAR—50 dms, Genoa
FISHMEAL—6,522 bgs, Albumina Supply Co, Antofagasta
2,205 bgs, Pacific Vegetable Oil Corp, Arica
9,902 bgs, Marine & Animal By Products Corp, Arica
3,052 bgs, Pacific Vegetable Oil Corp, Supe
4,370 bgs, Balfour Guthrie, Arica
GRAPHITE—1,000 bgs, Pacific Graphite Co, Hong Kong
NAPHTHA—131,327 bbls, Tidewater Oil Co, Puerto La Cruz
297,400 bbls, Tidewater Oil Co, Aruba
OLIVE OIL—78 dms, Seville
30 dms, Cadiz
OREGANO—200 bgs, Piraeus
PEPPER, BLACK—140 bgs, Internatio Rotterdam, Singapore
70 bgs, J H Elton, Singapore
70 bgs, Toyomenka Inc, Singapore
PETROLEUM, CRUDE—528,905 bbls, Richfield Oil Co, Dumai
POPPYSEED—100 bgs, B C Ireland, Rotterdam
SESAME SEED—300 bgs, B C Ireland, Corinto
150 bgs, W R Grace & Co, Corinto
200 bgs, Lastreto Phillips Co, Corinto
50 bgs, W R Grace & Co, San Juan del Sur
200 bgs, Hismoco American Co, Corinto
550 bgs, H M Newhall & Co, Corinto
SODIUM CYANIDE—50 dms, Ugine Industries, Havre
SODIUM SILICATE—200 bgs, International Selling Corp, Havre
TAPIOCA FLOUR—1,712 bgs, Stein Hall & Co, Bangkok
75 bgs, Morningstar Paisley Inc, Santos
TARTARIC ACID—20 dms, P W Bellingall, Rotterdam

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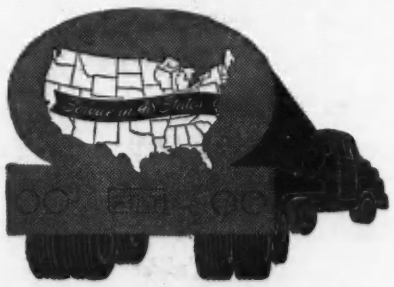

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